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KENTUCKY **GRAIN DRILLS**



INTRODUCTORY

BROADCASTING grain is a thing of the past with grain-growing farmers. With the past to guide, it is conclusive that one season may be most favorable, another most unfavorable for seeding. The up-to-date farmer is ever striving for larger and better crops. He consults the Agricultural Experiment Stations and authorities on grain growing and finds that all recommend seeding with a drill. This fact established, what drill to buy is the weighty question.

There are two VITAL points in construction of drills which the purchaser should seriously consider—accurate and even distribution of grain—THE FEED—and properly depositing the grain in the ground—THE FURROW OPENERS.

This catalog will interest you and clearly demonstrate that the manufacturers of Kentucky Drills, with their long experience, and their large specially equipped factory, are supplying machines which can be depended upon to fill every requirement of the exacting farmer.

THE AMERICAN SEEDING-MACHINE COMPANY

(Incorporated)

RICHMOND, INDIANA, U.S.A.

KENTUCKY

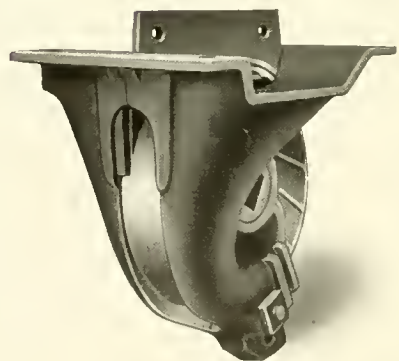
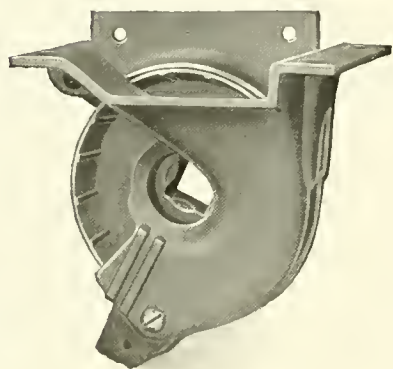
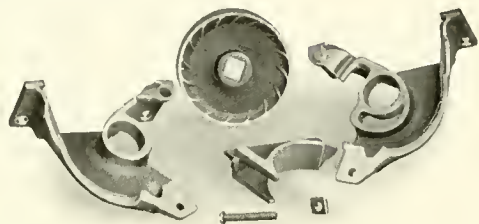
STANDARD EQUIPMENT

HIGH WHEEL DRILLS

AXLES	Continuous..... 12 and smaller sizes Divided..... 14 and larger sizes
BALANCE SPRING LIFT	All Disk Drills, except 6 and 12 sizes
COVERS FOR INTERNAL GRAIN FEED RUNS	Plain Drills—Single Fertilizer Drills—Double
FEED RODS	Continuous—Plain Drills..... 11 and smaller sizes Divided—Plain Drills..... 12 and larger sizes Continuous—Fertilizer Drills.... All sizes
HOPPER LIDS	Single—Plain Drills..... 10x7 and smaller sizes Double—Plain Drills..... 10x8 and larger sizes Single—Fertilizer Drills..... All sizes
HITCHES	Two-Horse, 1 Tongue..... 11 and smaller sizes Three-Horse, 1 Tongue..... 12 and 14x6 sizes Three and Four-Horse, 2 Tongues 14x7, 14x8 and 15x6 sizes Four-Horse, 2 Tongues..... 16x6 and larger sizes
LIFT LEVERS	One Lever..... 11 and smaller sizes Two Levers..... 12 and larger sizes
TONGUES	One Tongue..... 14x6 and smaller sizes Two Tongues..... 14x7 and larger sizes
TUBES	Steel Ribbon—regular on all drills
WHEELS	Wood, Ratchet Hub..... 12 and smaller sizes Wood, Linch Pin Hub..... 11 and larger sizes Three-inch Tire..... 16 and smaller sizes Four-inch Tire..... 18 and larger sizes
CHAIN COVERS	Regular on Disk and Shoe Drills
SEAT	Regular on Plain Drills, all sizes and styles Extra on Fertilizer Drills, all sizes and styles

KENTUCKY

INTERNAL FEED DRILLS



THE KENTUCKY INTERNAL OR DOUBLE RUN GRAIN FEED has established its merits with the up-to-date farmers. There is a reason. Accurate and even distribution of seed is very essential. Smooth running parts easily duplicated when necessary, are certainly desirable. Durability means economy, the watchword of success. The care taken in making the component parts, and in assembling the Kentucky Internal Feed Cup positively assures a perfect seed device. Every feed wheel is put on a mandril and formed into a true circle, so that when cups are assembled all feed wheels fit snugly and run smoothly. As an extra precaution, every cup after assembling is put in a jig to thoroughly limber up and to show positively all parts are perfect. When feed runs are attached to hopper a further test and inspection is made.

This extreme care in assembling and the practical features of construction as illustrated, mean something to a purchaser. The cup consists of only four parts held in proper position by a bolt--NOT RIVETS. This bolt provides an adjustment to take up any possible wear as well as to get correct adjustment when assembling.

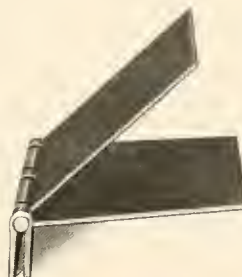
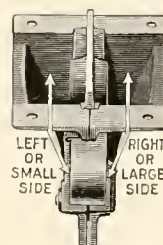
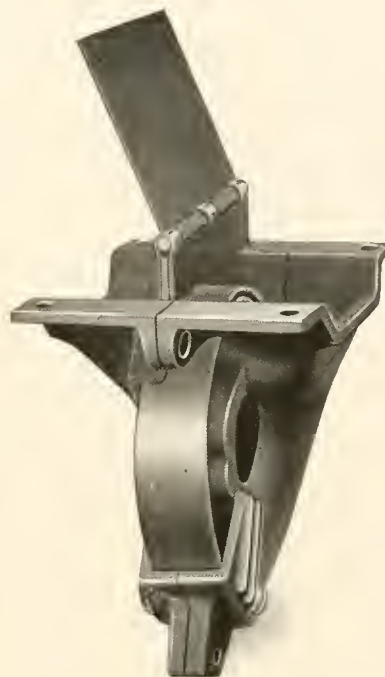
The sides of cups are cut away so feed wheels will contact with seed in hopper and, with aid of the small ribs under rim of feed wheels, the grain is forced through channels of cups in an even and uniform ratio. Back of cup is open to eliminate all possible friction.

KENTUCKY

INTERNAL FEED DRILLS

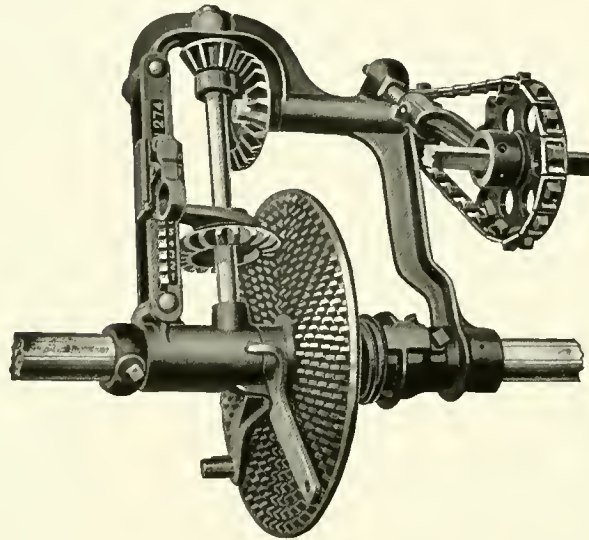
INTERNAL OR DOUBLE RUN GRAIN FEED is what the name implies—two feeds in one. The smaller side for wheat, rye, etc., the larger for oats, peas, beans, etc. Floppers are provided to cover the side not in use or double floppers can be procured to cover an entire cup, making it possible to use only such feeds as desired. A square steel feed rod passes through each feed wheel, which insures each and every wheel turning at the same rate of speed. One revolution of feed wheel carries out a given amount of seed; two revolutions twice as much and so on. This insures each feed run sowing exactly the same quantity of seed. Should an accident make it necessary to take out feed rod for replacing a broken casting it is very easily done, as there are no pins or cotters through feed rod to remove. Simply loosen set screw in sprocket wheel and pull rod out.

Quantity is regulated by speed of feed wheel, as every revolution of feed wheel carries out a measured quantity of seed. This speed is controlled by a unique transmission of superior merit.



KENTUCKY

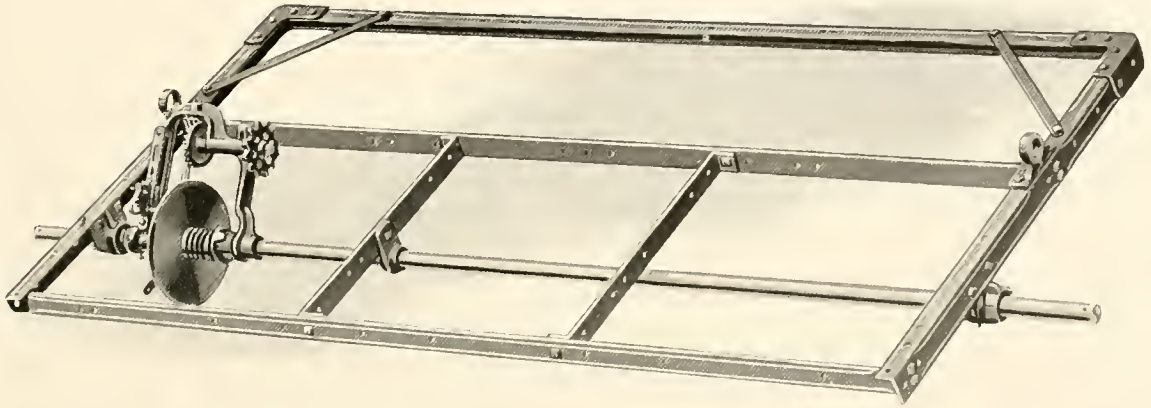
INTERNAL FEED DRILLS



KENTUCKY SPEED TRANSMISSION is a departure from those in common use. It is really a machine in itself, assembled as an independent factor of the drill, the yoke, shafts, pinions and sprockets must all be perfect and work exactly right. A glance at the cut clearly shows the construction, large cold rolled steel upright shaft, seated bottom and top in the same yoke casting. This positively assures sliding pinion contacting alike in each of the ten rows of teeth on multiple speed wheel as the face of this wheel is parallel to the upright shaft. The bevel pinion on upper end of upright shaft drives countershaft to which is attached sprocket wheel (6 and 12-tooth sprocket wheels supplied.) From this sprocket wheel chain runs to sprocket on feed cup shaft of grain hopper. This effective transmission insures durability and practically eliminates pinions wearing out as experienced with other types of change speed gears. Large teeth or cogs on bevel pinions and disk wheel mean strength and durability. Twenty changes of quantity for each side of cup, forty all told. Special sprockets, reducers, etc., can be secured for other quantities to fill very special requirements. When any foreign article gets in feed that must cause breakage, nine cases in ten a link of sprocket chain snaps instead of an important casting. Remove broken link, adjust threaded rod chain tightener and yoke support. Done in few minutes. No time lost.

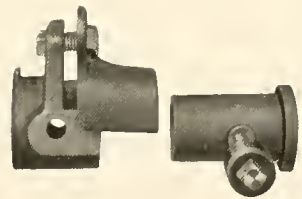
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INTERNAL FEED DRILLS

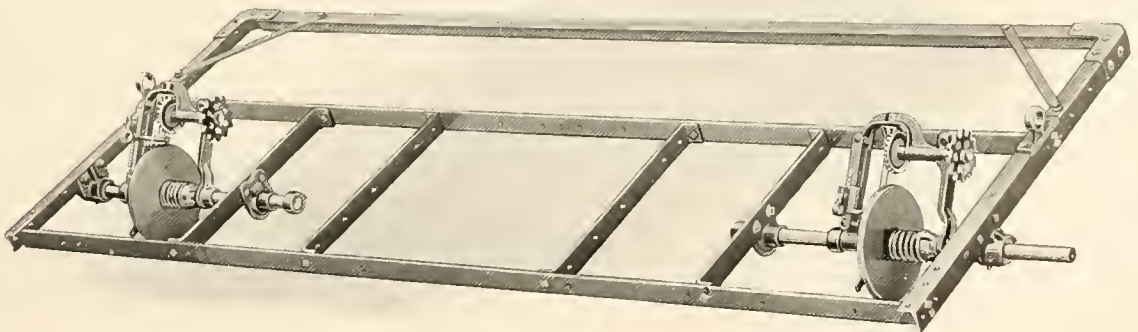


KENTUCKY DRILL FRAMES are made of angle steel, which material combines lightness with strength. Frames are so strongly braced with cross rails, corner ties and truss rods that they form a solid, substantial foundation, to which axle, hopper, furrow openers, gang press wheel attachments, seat or foot board, etc., can be attached with absolute assurance of all parts being held in normal position.

AXLES are 1 $\frac{3}{8}$ inch cold rolled steel and are attached to frame with axle box having oscillating removable sleeve and hard oiler. No binding on axle, consequently light draft and little wear. Continuous axle on drills with 12 or less furrow openers, and divided axle on 14 and larger size drills.

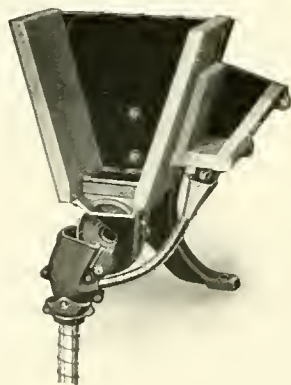
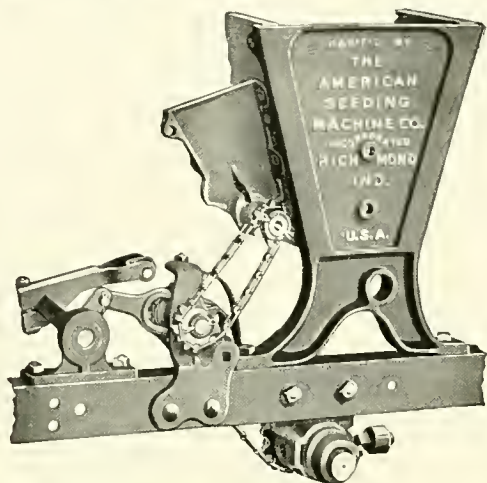
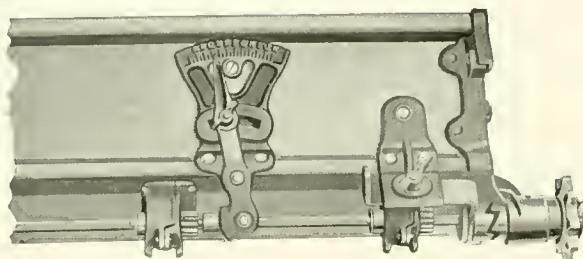


Self-Aligning Oscillating Axle Box on Kentucky Frames.



KENTUCKY

INTERNAL FEED DRILLS



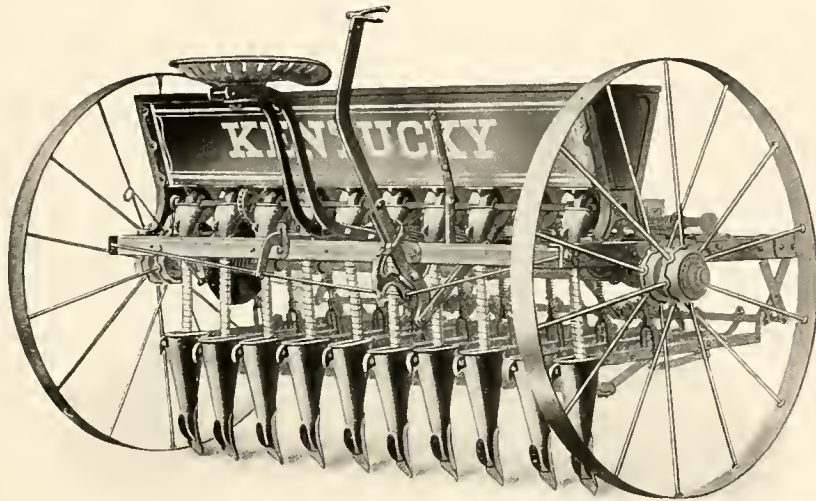
KENTUCKY GRASS SEED ATTACHMENTS are built right. Have positive force feed, which sows an equal amount of seed from each feed run. The quantity to be sown can instantly be set to desired amount by simply locating feed lever on indicator plate. The seeder is automatically thrown out of gear when furrow openers are raised off ground. There is also an independent in and out of gear device, making it unnecessary to run grass seeder unless seeding with it. Grass Seeders on Internal Feed Drills are driven direct from main axle by using a countershaft, which is attached to side angle of frame. In this manner a long, unwieldy single chain is obviated.

Seed can be distributed broadcast or sown in rows. To sow in rows Alfalfa Spouts, which are included with each seeder, are attached to grass seed feed cup and conduct seed into top of grain tube. Drilling alfalfa, clover, and grasses in rows puts every seed at even and proper depth; the plants must all come up at one time, and make uniform growth. In rows plenty of ventilation and sunshine is possible, producing a sturdy, fast growing crop. Old pastures and meadows may be re-seeded, and the result will surprise the most skeptical.

Long rear delivery grass seed tubes instead of regular type are supplied only when specially ordered. Used for distributing grass seed in rear of furrow openers.

KENTUCKY

INTERNAL FEED DRILLS



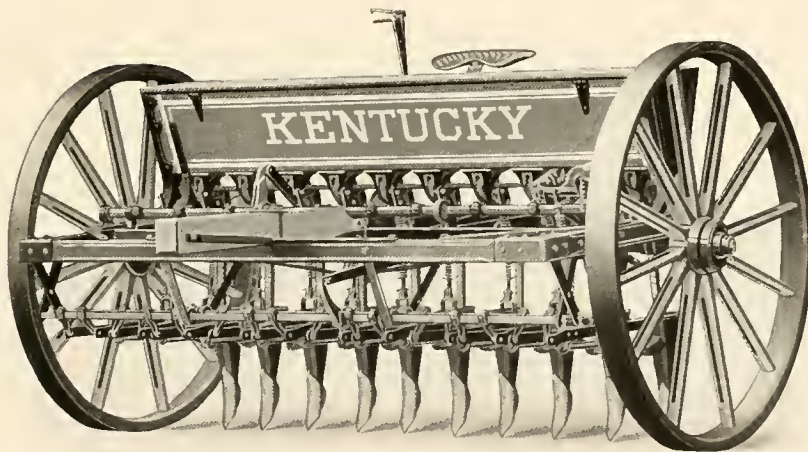
10 x 7 Plain Spring Hoe Drill, Steel Wheels.

Pin Hoes can be substituted for Spring Hoes.

Plain Hoe Drill Sizes:

9, 10, 11, 12, 14, 16, 18 and 20 Hoes—7 inches apart.

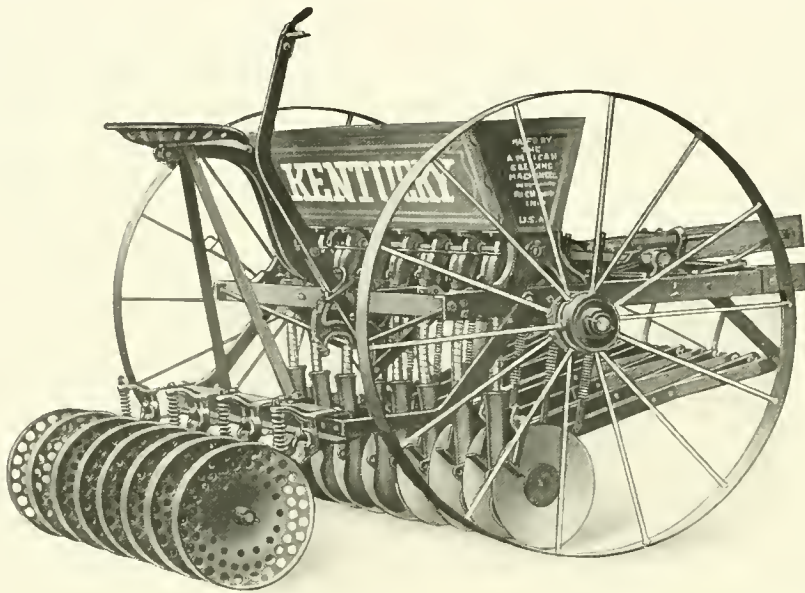
8, 10, 12 and 14 Hoes—8 inches part.



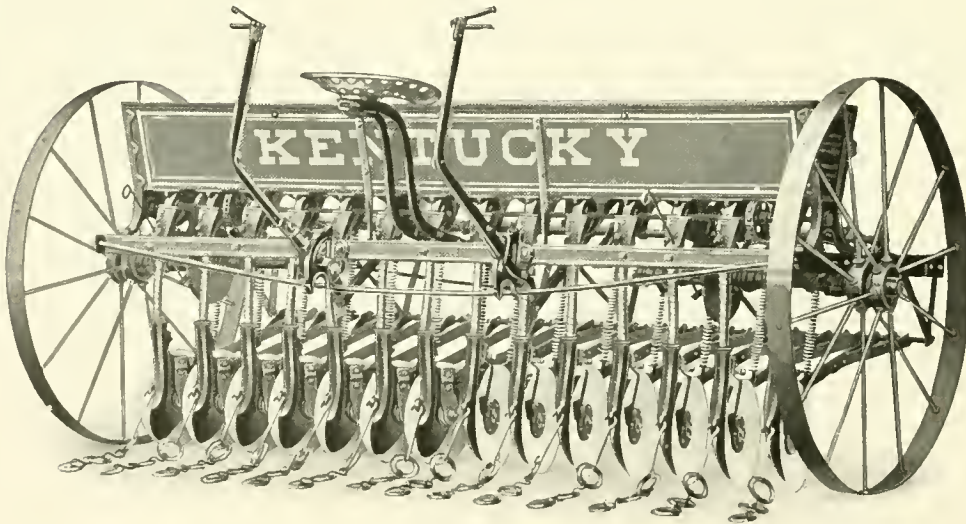
10 x 7 Plain Spring Hoe Drill, Wood Wheels.

KENTUCKY

INTERNAL FEED DRILLS



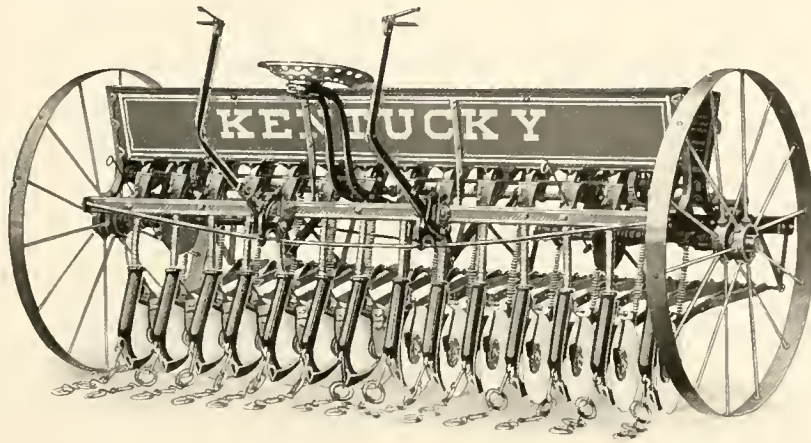
8 x 8 Plain Open Delivery Single Disk Drill, Steel Wheels, With
Gang Press Wheel Attachment.



14 x 7 Plain Open Delivery Single Disk Drill, Steel Wheels.

KENTUCKY

INTERNAL FEED DRILLS



14 x 7 Plain Closed Delivery Single Disk Drill, Steel Wheels.

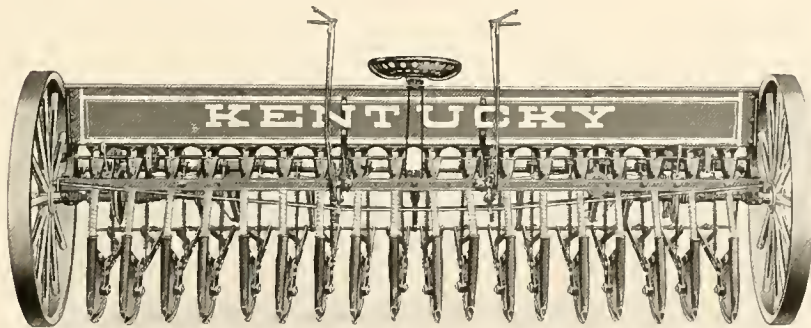
Open Delivery Single Disks, Saw Blade or Curved Blade Double Disks, or Shoes may be substituted for Closed Delivery Single Disks.

Plain Disk Drill Sizes:

10, 12, 14, 15, 16, 18, 20 and 22 Furrow Openers—6 inches apart.

9, 10, 11, 12, 14, 16, 18 and 20 Furrow Openers—7 inches apart.

8, 10, 12 and 14 Furrow Openers—8 inches apart.



18 x 7 Plain Closed Delivery Single Disk Drill, Wood Wheels.

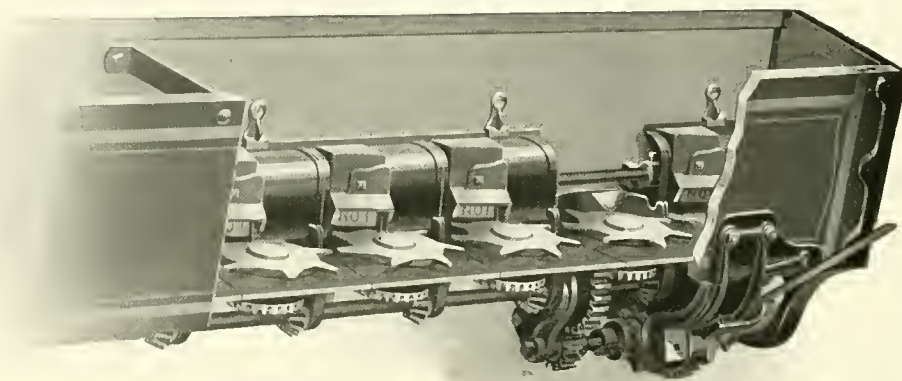
KENTUCKY

INTERNAL FEED DRILLS

THE KENTUCKY STAR FERTILIZER FEED. A chain is only as strong as its weakest link. The same theory applies to a fertilizer grain drill. It matters not how good may be the rest of the drill, if fertilizer feed is defective, the drill is defective.

Years of experience only could devise a perfect fertilizer feed such as is used on Kentucky Drills, a feed that will handle all grades of fertilizer and in any quantity. Some brands of fertilizer are absolutely dry and dusty; another brand may be "mucky," wet or damp. It is desirable, at times, to distribute in very small quantities, at other times extremely large amounts. The fertilizer feed to be a success must be constructed to meet all these conditions. Such is the Kentucky Star Fertilizer Feed.

An individual or separate fertilizer feed is provided for each furrow opener. The revolving feed wheels with fingers on outer edge carry the fertilizer under the back plates to outlet or hole above the tubes. These outlets in bottom plates are irregularly shaped, elongated holes, so located that before one finger on feed wheel passes entirely over outlet, the following finger on wheel is over it. This

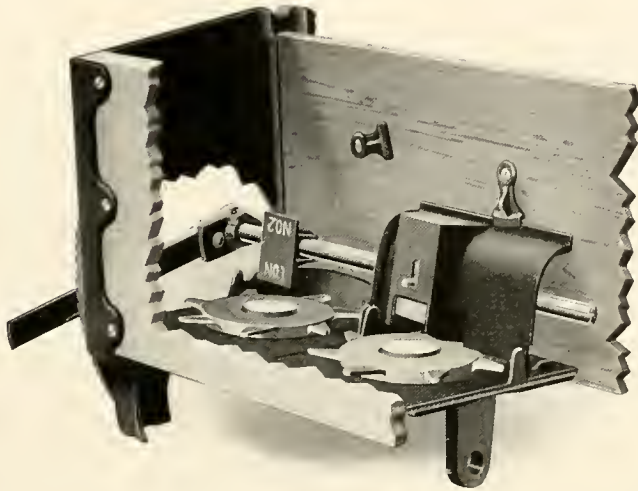


arrangement insures uniform quantity and eliminates wavy sowing. Pivoted weights or knockers operated by the fingers on feed wheels keep the outlets free from lumps or sticky fertilizer.

The quantity is regulated in two ways—position of quantity gates and speed of feed wheels. The quantity gates, which are reversible, slide in grooves under back plates and are raised and lowered by eccentric movement of gate shaft connected to quantity lever on end of hopper. This quantity lever alone admits of 25 different quantities, using No. 1 end on quantity gate. By reversing position of quantity gate and using No. 2 end, 25 other quantities are obtained. This gives a total of 50 different quantities of wide range with the same speed of feed wheels. For large quantities of fertilizer, lime, etc., the speed of feed wheels are increased. The fertilizer drive device is very simple as well as substantial. A heavy No. 51 sprocket chain runs from axle to cold rolled steel key seated $\frac{3}{4}$ -inch countershaft. The cogs and clutches on this countershaft are heavy to stand any undue strain. The shift lever in center notch disengages both clutches—fertilizer out of gear. Lever in right notch regular or slow speed. In left notch fast speed.

KENTUCKY

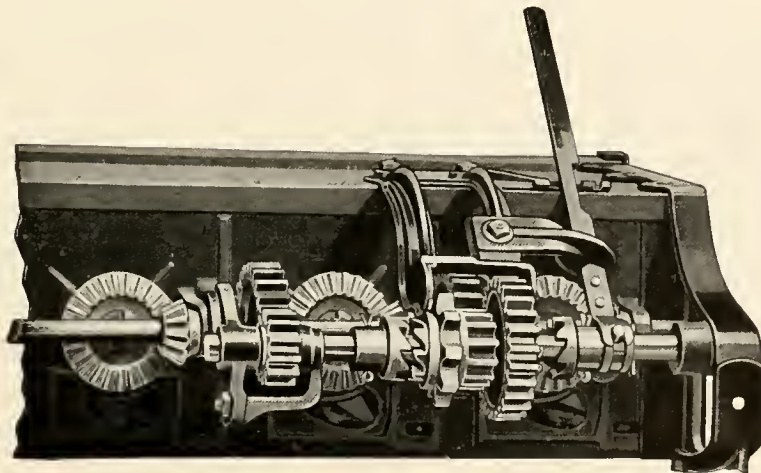
INTERNAL FEED DRILLS



which increases speed of feed wheels. This change in speed of feed wheels with changes of quantity gates already mentioned gives 50 additional quantity ranges, a total of 100 changes, ranging from 40 to 1135 pounds of average commercial fertilizer. All quantity changes, except where quantity gates are to be reversed, can be made while drill is in motion by merely shifting levers.

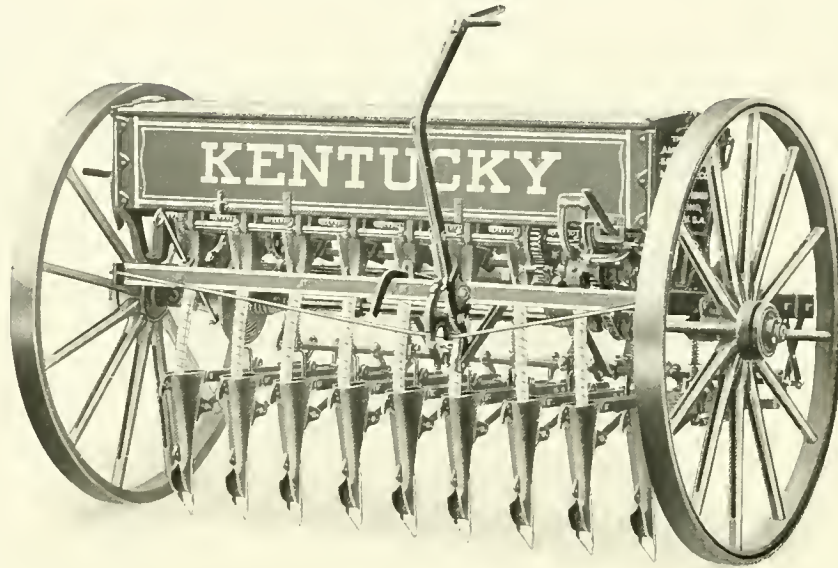
Adjustable shed plates over quantity gates prevent fine bone meal or other dry commodities from feeding too fast or seeping through outlet when gates are up and drill not in motion.

Every operator familiar with drilling fertilizer realizes the necessity of cleaning the fertilizer feed, specially before storing drill from one season to another. The Kentucky Star Feed requires no tools for removing parts. Turn back thumb latch, remove the back plate and lift out feed wheel. Sweep the bottom with a whisk broom, replace the parts and the feed is cleaned.



KENTUCKY

INTERNAL FEED DRILLS

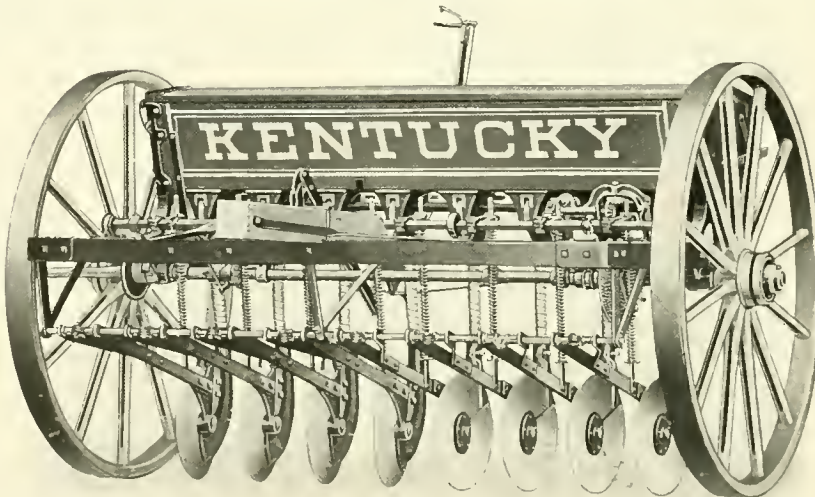


9 x 7 Fertilizer Spring Hoe Drill, Wood Wheels.

Fertilizer Hoe Drill Sizes:

9, 10, 11 and 12 Hoes—7 inches apart.

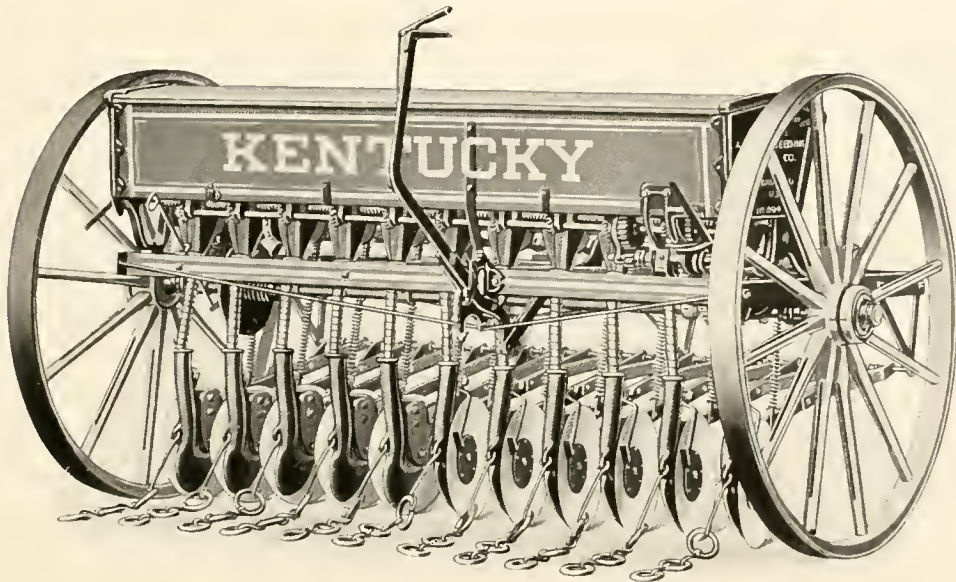
6, 8, 9, 10 and 11 Hoes—8 inches apart.



8 x 8 Fertilizer Open Delivery Single Disk Drill, Wood Wheels.

KENTUCKY

INTERNAL FEED DRILLS



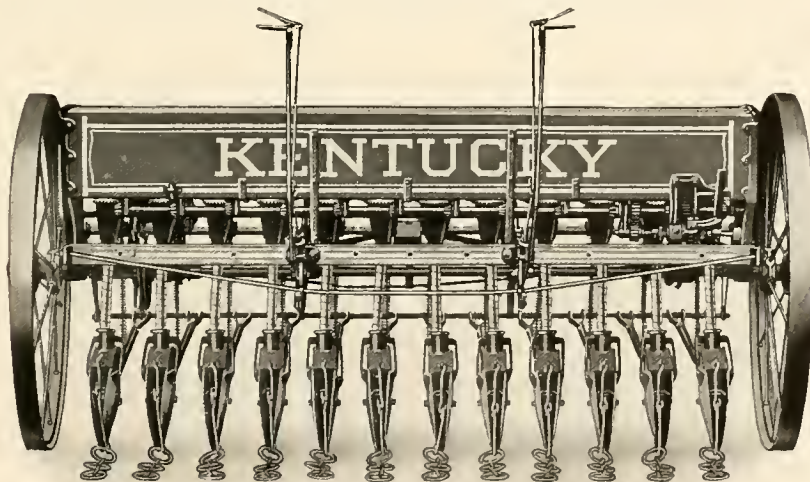
11 x 7 Fertilizer Open Delivery Single Disk Drill, Wood Wheels.

Saw Blade Double Disks, Curved Blade Double Disks, Open Delivery Single Disks and Shoes interchange on Fertilizer Disk Drills.

Fertilizer Disk Drill Sizes:

9, 10, 11 and 12 Disks—7 inches apart.

6, 8, 9, 10 and 11 Disks—8 inches apart.



12 x 7 Fertilizer Curved Blade Double Disk Drill, Steel Wheels.

KENTUCKY

INTERNAL AND FLUTED FEED GRAIN DRILLS

SINGLE DISK FURROW OPENERS



The furrow opener is a vital point in the construction of a grain drill. It is the medium through which seed is properly or improperly deposited in the ground. Too much consideration can not, therefore, be given to the construction of furrow openers. There are important features to consider—drag bar, disk bearing, angle and under-cut of disk, position of boot, scraper, spring pressure, lift and drop of disk, manner of attaching drag bar to frame, etc. Years of actual experience, with the strenuous field work of a practical experimental department only could accomplish the efficiency of Kentucky Single Disk Furrow Openers.

DRAG BARS are made of high carbon steel and perfectly straight. Never heated to twist or bend, as heating draws temper. They are set on edge, which position of Kentucky spring steel drag bars gives elasticity and permits side thrust of disk when passing large rocks, stumps, etc., which often causes breakage of boot or hanger on furrow openers having twisted or flat drag bars. The main drag bar is braced or held in normal position by a steel side brace or leaf. This side brace has slotted adjustment at rear end for changing under-cut of disk when necessary to meet difficult soil conditions, and to line up all disks with the SAME UNDER-CUT which insures all seed trenches being exactly alike. A steel pull rod passes through front ends of drag bar and side brace, which are held in position on rod by a pressed steel keep. This manner of attaching furrow openers to frame permits of LIKE SPACING of all furrow openers, as drag bars can be shifted on rod to desired position. Not a casting being used, breakage is positively eliminated, which frequently occurs where cast or malleable drag bar hangers are used.

EXTENSION PLATES to lengthen alternate drag bars in order to zigzag open delivery furrow openers, can be supplied and are easily attached.

DISK BLADES are polished on both sides, having proper dish, and are attached to hanger at correct angle and under-cut. The forward edge of disk blade stands nearly perpendicular when entering the soil, insuring easiest possible penetration. The onward or rolling motion of the curved disk makes a revolving scoop, which lifts the soil from the furrow, leaving a perfect seed bed, U-shaped, just wide enough. Does not create extra draft by opening a wide, useless furrow.

KENTUCKY

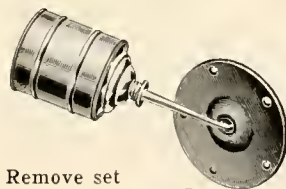
INTERNAL AND FLUTED FEED GRAIN DRILLS


SINGLE DISK FURROW OPENERS

KENTUCKY STEEL DISK BEARINGS have been used for years and proven perfectly satisfactory in every detail. The simple, substantial construction is described in detail on this page. Bearing block, thoroughly chilled, is enclosed in case-hardened steel housing and has a case-hardened steel plate to contact with instead of the disk itself. A disk blade can not be case-hardened or it would crack and break especially on the edges. It is obvious, therefore, why the case-hardened steel plate is used, as its hardness prevents chilled bearing block wearing crease or seat in it as it will in a disk blade.

The steel housing permits, without danger of breakage, the solid riveting of parts to disk, and when firmly bolted to hanger using dust washer and spring as an extra precaution, a dust proof, oil retaining disk bearing results. Pressed steel surfaces of housing and plate are perfectly smooth, chilled bearing blocks are smooth like glass, and with bearing swimming in oil very little friction is possible, which means long life. Bearing blocks with wide upright position give large bearing surface at the proper place to counteract the natural side thrust. This accounts for absence of wobbling disks on Kentucky Drills.

Oiling easily done by removing wrench-tight set screw in center of steel plate. Only necessary to oil two or three times per week.



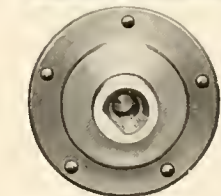
Remove set screw for oiling. 



Pressed Steel Bearings



Very narrow.
No clogging.



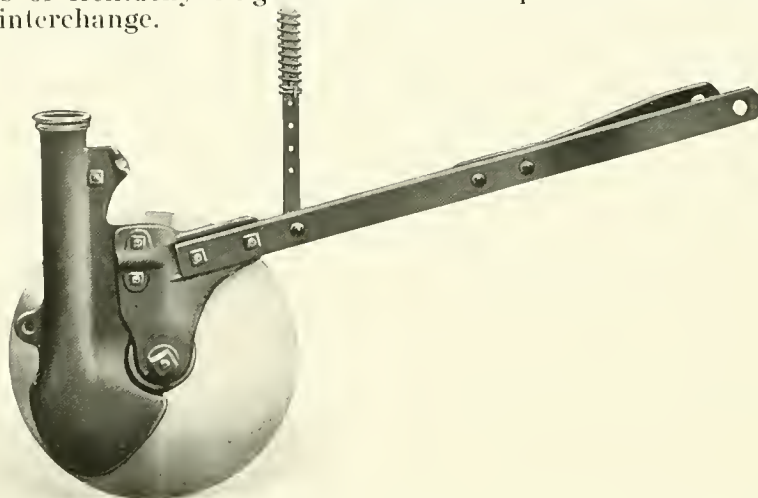
Wide surface. No wobbling.

KENTUCKY

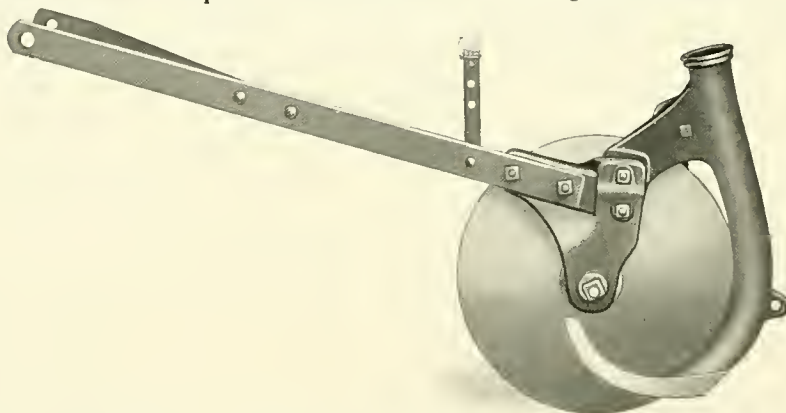
INTERNAL AND FLUTED FEED GRAIN DRILLS

SINGLE DISK FURROW OPENERS

BOOTS are of two types—designated as open delivery or closed delivery. All other parts of Kentucky Single Disk Furrow Openers are similar and the boots readily interchange.



OPEN DELIVERY SINGLE DISK is a very popular furrow opener, as it deposits the seed into the very bottom of the seed bed, beneath the disk bearing. The broad shield-like termination of the open delivery boot is made to snugly fit the curvature of disk blade and forms a scraper for convex side of the disk. Seed passing through this boot, strikes the curved shield and is deflected into the bottom of seed bed before soil can filter in to partially fill trench. Seed is deposited at a uniform depth, which insures even germination, ripening and growing.



CLOSED DELIVERY SINGLE DISK boots were made primarily to handle wet, stick, gumbo soil, very common in the Northwestern states. Its popularity has spread and this boot is now being used extensively in all Western states. The construction is what the name implies; that is, a closed boot through which the seed passes to exit at lower end immediately behind steel toe piece. This toe piece is a steel knife, fitting snugly against disk and cuts—not scrapes—the sticky, pasty soil from the disk blade. Ample clearance between boot and disk prevents clogging.

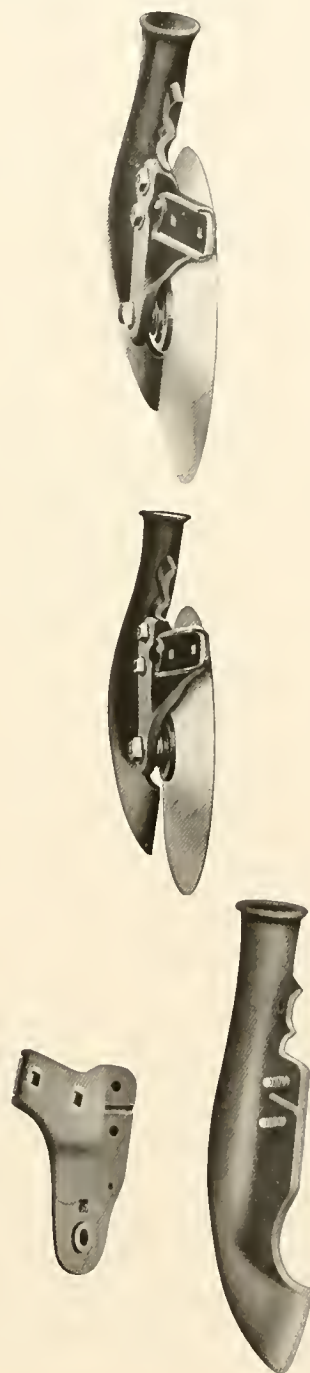
KENTUCKY

INTERNAL AND FLUTED FEED GRAIN DRILLS

SINGLE DISK FURROW OPENERS

ROCKER ADJUSTMENT ON BOOTS

The saying, "Necessity is the Mother of Invention," is clearly brought out in this construction. Years ago when first making Kentucky Closed Delivery Furrow Openers, we found it utterly impossible, owing to small variation in castings, to get a uniform and proper contact of toe piece to disk blade. We tried every conceivable way, from a manufacturer's standpoint, but found out it could not be done with boot and hanger combined in one solid casting. We then devised and patented the rocker adjustment of boot. This principle, clearly illustrated on this page, is simple and thoroughly effective. On the boot is cast a rib, which seats in a shallow groove between the two bolt holes in hanger. When placed together with the disk blade in position the rib and groove member, being held in position by bolts on either side. The boot with its upraised rib will rock in the groove, forming a pivot which readily permits of any desired location of toe piece on closed delivery and shield on open delivery boots. This insures the snug and uniform fitting of all boots to disk blades, which means a live, free turning disk. The additional advantage of this adjustment is to take up the natural wear of toe piece on closed delivery and shield on open delivery boots, caused by contact with revolving disk. Without this wear being taken up, the open space forms a receptacle for wire grass, roots or trash which accumulates and quickly locks the disk, and often it is necessary to purchase new boots to overcome this trouble. Consider carefully this feature on Kentucky Single Disk Furrow Openers, for it certainly is an asset to every owner of a single disk grain drill.



KENTUCKY

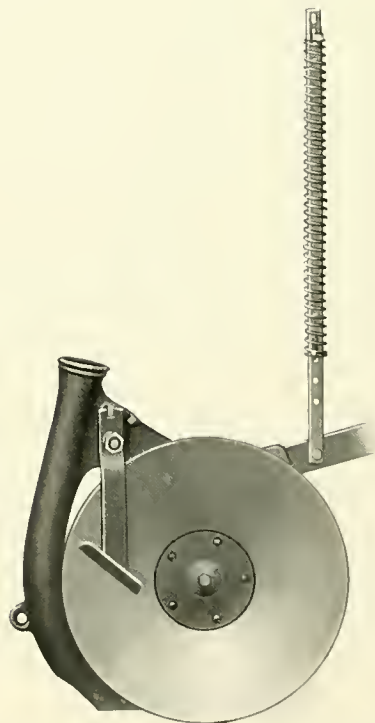
INTERNAL AND FLUTED FEED GRAIN DRILLS



SINGLE DISK FURROW OPENERS

SCRAPERS are like the "gun in Texas," when you need them, you need them badly. A trappy, ineffective disk scraper is worse than none, but in the Kentucky scraper is a tried-out, effective, widely copied construction. Held in position by notch in end of heavy steel shank and desired tension given by coil spring which is positive, uniform and easily adjusted. When soil conditions do not demand use of scrapers, cut down draft by shifting shank over to other lug on boot. Quickly done and when again needed, scrapers are there, not a mile away, or lost.

SPRING PRESSURE for forcing disks into hard soil can readily be adjusted to any desired tension. The tension is regulated by notches in lever rack and by position of spring keep in lower end of pitman or pressure strap. At upper end of pitman are oblong holes for FLAT cotters, which will not close up and lose out. This adjustment is to regulate raise and drop of disks. Flat cotter in lower hole raises furrow openers high off ground for transporting drill over rough, uneven roads. Front pressure gives a clean back side to drill, as pressure bar, pressure arms, pitmans, springs, etc., are located in front of hopper entirely out of the way of the operator when filling hopper, oiling disks, etc. Front pressure gives a greater range to disk without exhausting efficiency of pressure spring and has a tendency to relieve neck weight in very hard ground.

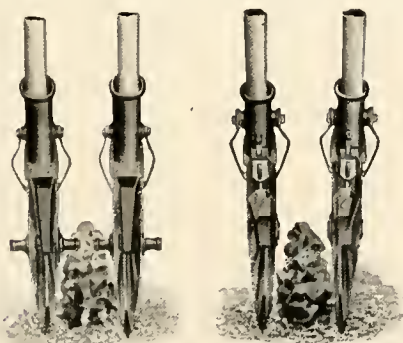
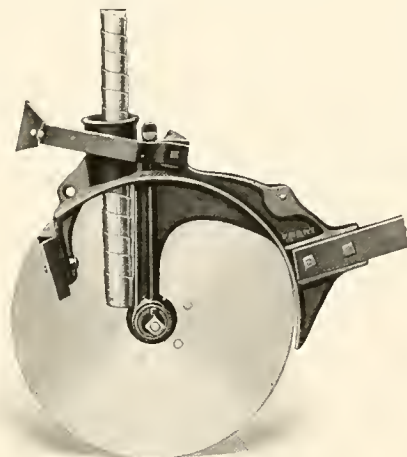


← KENTUCKY →

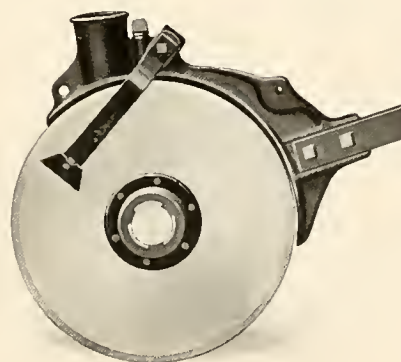
INTERNAL AND FLUTED FEED GRAIN DRILLS

SAW BLADE DOUBLE DISK FURROW OPENERS

Saw Blade type of double disk furrow openers are most commonly used, even at an extra cost, as the construction gives more satisfactory results both for seeding and durability. Saw Blade Disks are what the name implies—made of same material and finished exactly like a circular saw blank. For double disk furrow openers to work right, the blades must be perfectly true, uniform in size and highly polished. The two blades are attached to arch or boot so they contact in front where furrow opener enters soil, to give a sharp, cutting coulter-like penetration. Angle at which blades are set is the minimum to open sufficient trench for seed bed. When blades spraddle wide in the rear, there is extra soil resistance, and more pressure required to force in the ground, both of which increase draft. There is more wear on bearings, there is less clearance between furrow openers. The clean-cut compact Kentucky saw blade disk bearing is a marvel of simplicity, has a narrow chilled bearing block, a chilled hub, dust ring with retaining spring and a pressed steel outside dust cap. Only 2½ inches through, as bearing surface is in diameter. Long protruding hubs or journals, which obstruct clearance, are avoided. Oil conduits located above disks, easy to reach and closed with a screw plug to keep out dust. Inside scraper is V-shaped spring steel and is attached to rear of arch by wedge block and bolt. Tightening nut forces open this spring scraper when necessary to take up wear on same. Outside scrapers are adjustable to any desired tension against blade or can be disengaged without removing from arch.



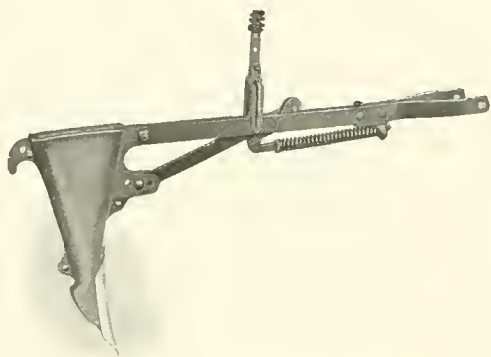
NOT Kentucky. The Kentucky.
No protruding hubs on Kentucky Double
Disks. Easy to see which is lightest draft.



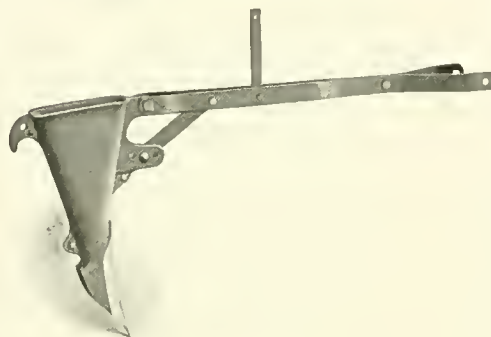
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INTERNAL AND FLUTED FEED GRAIN DRILLS

HOE FURROW OPENERS



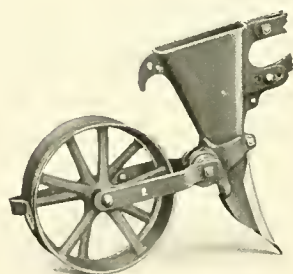
When ground is free from corn-stalks, weeds, grass, etc., no more satisfactory type of furrow opener can be used. The shift lever permits hoes being set in straight rank, zigzagged three inches, or zigzagged six inches. Positions can be changed when drill is in motion, and when zigzagged one row of hoes moves forward, the other backward equal distances, which maintains a like angle of pressure straps. This gives even depth to both front and rear ranks.



SPRING HOE is the more popular type of Hoe Furrow Openers. The hoes are made of extra heavy **PRESSED STEEL** and have reversible steel points. Angle or "Pitch" of hoe can readily be changed by locating metal pin in any of the three holes in extension on front of hoe. Return spring is thoroughly effective, never failing to force hoe to normal position, after encountering rigid obstructions.



STRAIGHT PIN HOE furrow openers have the same hoe as used on spring hoe type, but drag bars are differently constructed in order to use a wood break pin. This wood break pin is square and passes through hole in front end of adjustable strap and holes in drag bars. When an obstruction, too firm to dislodge, is encountered, a pin breaks. A new pin repairs the damage.

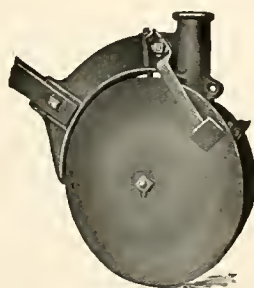


CROOKED PIN HOE is particularly adapted to certain western territory. It is a cast hoe and interchanges with the straight pin hoe.

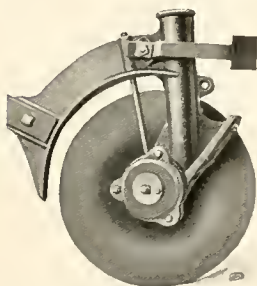
BET PRESS WHEEL is a combined covering and pressure attachment, used when sowing beet seed and beans. Can be put on any steel hoe, necessary parts to attach included with the wheel covering attachment for hoe drills.

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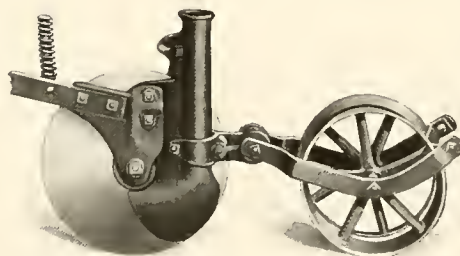
INTERNAL AND FLUTED FEED GRAIN DRILLS



Curved Blade Double Disk.



One Disk Removed.



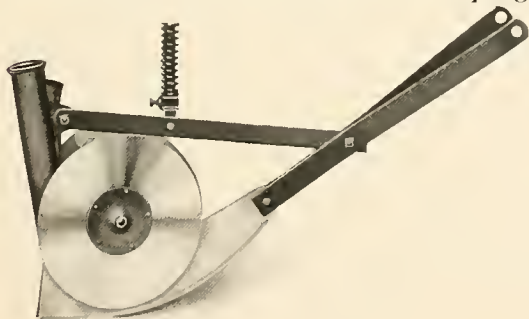
Beet Press Wheel Attached to Single Disk.

CURVED BLADE DOUBLE DISKS are made with practically straight edges and bulging centers to accommodate the bearings. One disk is a little smaller than the other, which causes the large disk to act as a cutting blade while being drawn forward. The flat chilled bearings are dust proof, with felt dust washers. Because of the wide bearing block, disks do not wobble. Soft oil is carried to bearings through large reservoir protected at top by screw plug. Both inside and outside scrapers are adjustable. Inside scrapers are wedge-shaped and arranged to take up wear.

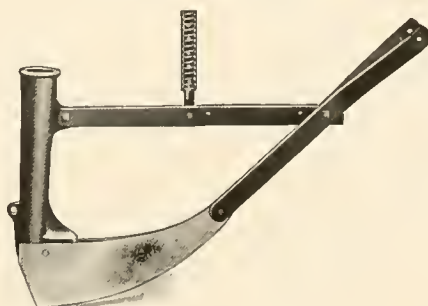
COVERING WHEEL ATTACHMENTS may be attached to any Open Delivery Single Disk. Consists of two wheels. Encased in flat steel frame with scraper.

COMBINED SHOES AND TWIN DISKS are used principally in Southern States for deep furrow seeding as a guard against frost killing oats crop. When light weight oats are sown in bottom of deep trenches, from 15 to 17 inches apart, this danger is eliminated. Crop depends upon the height and stability of ridges. A long shoe or runner with heel open about one inch at rear end is placed between two 11-inch disks. In action, forward part of shoe cuts the furrow, immediately followed by the rolling concave disks which lift the soil. Each disk piles up same amount of earth on each side, consequently all ridges are equal height. These ridges remain undisturbed because wheel travels in bottom of furrow. The shoe handles the seed and the disks the soil, resulting in the only combination yet made that will produce proper ridges and leave them unbroken.

INTERCHANGEABLE SHOES may be procured to use in place of single or double disks. Cross bar has three adjustment holes for changing the pitch, to conform to soil conditions. Heel is plugged with steel to prevent clogging.



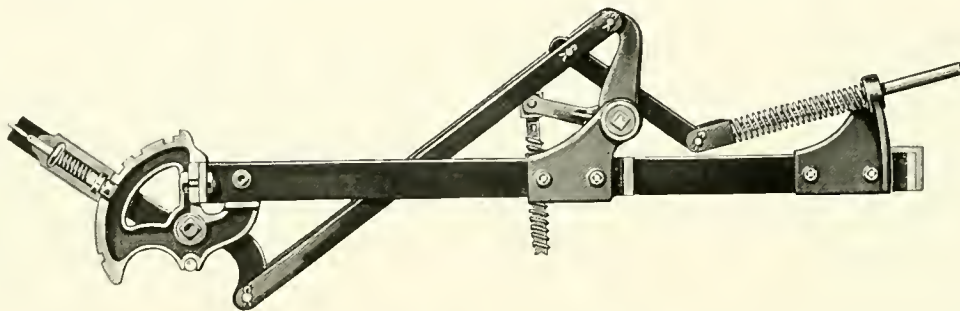
Combined Shoe and Twin Disk.



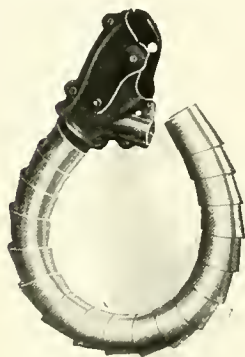
Interchangeable Shoe.

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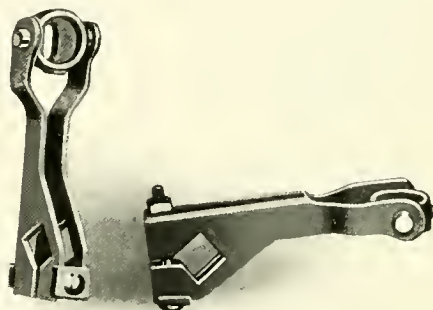
INTERNAL AND FLUTED FEED GRAIN DRILLS



KENTUCKY LIFT SPRING is used on all disk drills, except 6 and 12 sizes. Has adjustable tension for spring to counteract weight of furrow openers on different size drills and gives a quick, easy lift for man or boy.



PRESSURE ARMS are made of heavy pressed steel, with reinforced steel swivels. Neat, light in weight and durable.



STEEL RIBBON TUBES WITH PRESSED STEEL TOPS used on all drills. No breakage of tube tops either in shipment or in the field. Ribbon tubes always retain their normal inside diameter, insuring a steady flow through them.



Wood Wheel with Ratchet Hub.

WOOD WHEELS are made of well seasoned stock of good quality. Spokes have heavy flange, deep seated in 7-inch metal hub. Heavy tires shrunk on cold by hydanlic pressure.

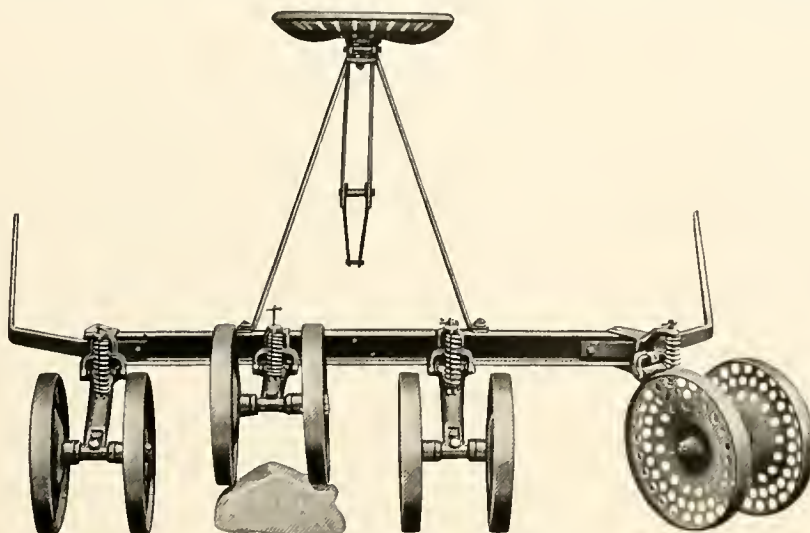
STEEL WHEELS are made to stand bard usage. Have round steel spokes set with wide 4-inch stagger, which insures excessive strength. All wheels 48 inches in diameter. Wood and Steel Wheels interchange.



Steel Wheel with Linch Pin Hub.

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INTERNAL AND FLUTED FEED GRAIN DRILLS



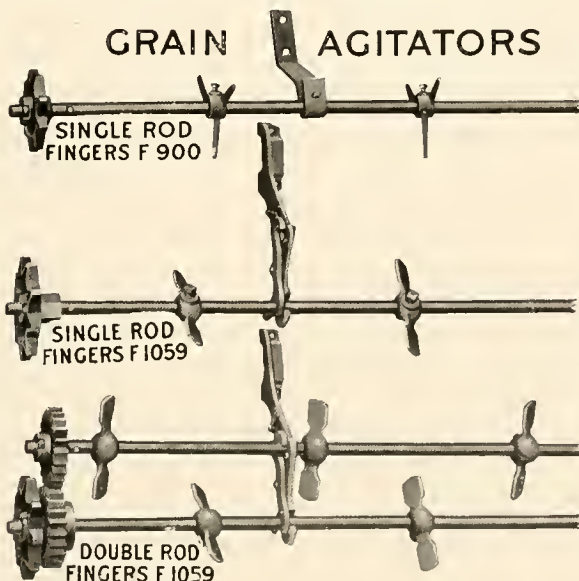
Gang Press Wheel Attachment

For certain localities and some seasons, it is best to pack the soil over each row of drilled grain. The Gang Press Wheel Attachment, carrying the weight of the driver, will be found very satisfactory for this purpose. Drills with an odd number of furrow openers are not supplied with these attachments, since the wheels are arranged in gangs of two. Each pair of press wheels is pivoted to a heavy steel cross beam. Pressure springs over axle of each gang gives sufficient flexibility when passing over obstructions and add much to comfort of driver. Being pivoted to cross beam, it is possible to turn square corners without inconvenience. Not supplied for 6 x 8 size.

GRAIN AGITATORS are necessary to regularly sow, in desired quantities, some grades of oats. Oats being light and bearded have a tendency to bridge between and, in many cases, over the feed runs. This bridging prevents flow of seed into feeds, the result is uneven sowing and limited quantity.

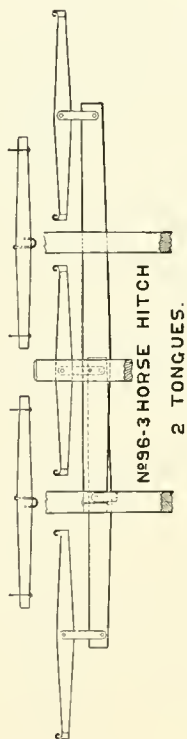
Agitator revolving in the hopper breaks these bridges, allowing the oats to pass readily into the feed runs. Three types of agitators are supplied. For ordinary Northern Oats we recommend single rod with fingers F900; for medium weight and fairly cleaned oats use single rod with fingers F1059, and for extremely light and foul oats use double rod with fingers F1059.

GRAIN AGITATORS

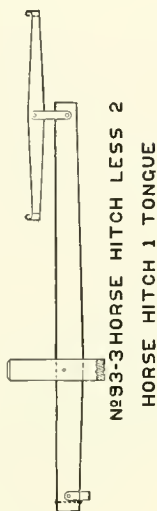


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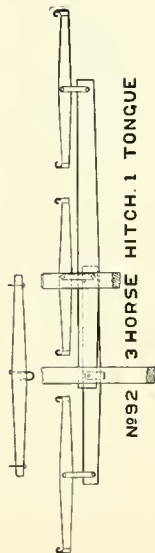
INTERNAL AND FLUTED FEED GRAIN DRILLS



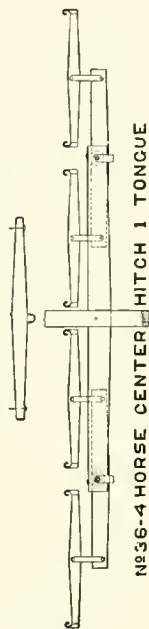
No. 96-3 HORSE HITCH
2 TONGUES.



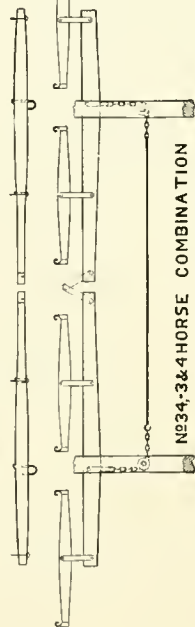
No. 93-3 HORSE HITCH LESS 2
HORSE HITCH 1 TONGUE



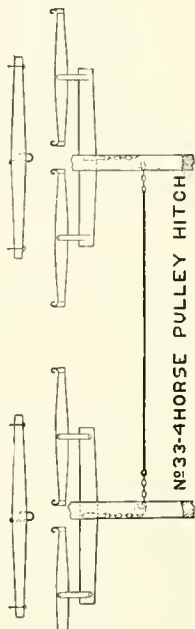
No. 92 3 HORSE HITCH. 1 TONGUE



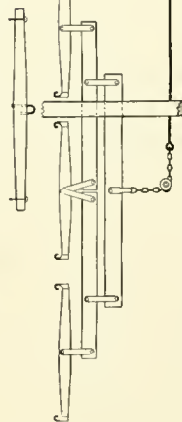
No. 36-4 HORSE CENTER HITCH 1 TONGUE



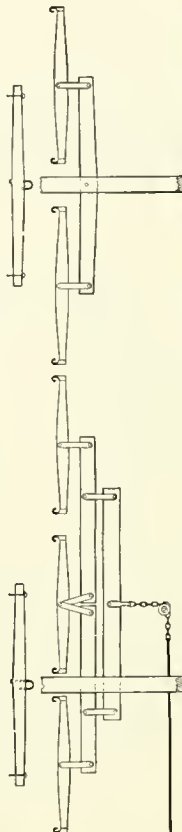
No. 34-3 & 4 HORSE COMBINATION
HITCH. 2 TONGUES.



No. 33-4 HORSE PULLEY HITCH
2 TONGUES



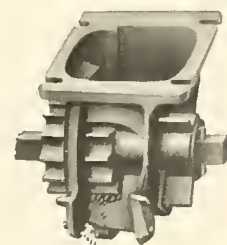
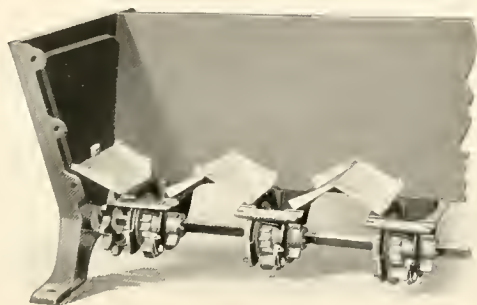
No. 35-6 HORSE HITCH 2 TONGUES



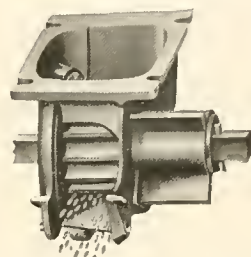
No. 30-2 HORSE HITCH 1 TONGUE.

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FLUTED FEED GRAIN DRILLS

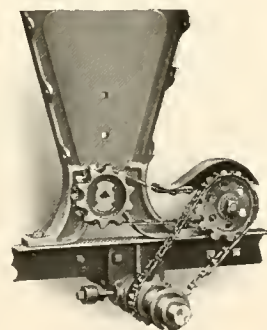


Sowing Small Quantity.



Sowing Large Quantity.

KENTUCKY FLUTED GRAIN FEED is no experiment, as it has been successfully used as long, or possibly longer, than any other type of grain feed. It is a positive force feed and sows with exceptional uniformity. The fluted feed roll positively forces seed through the cup. The angle position of lip at exit of feed insures a steady flow of grain from the cup—no bunching. There is no complicated cog driving mechanism, sprocket chain from main axle to feed rod does the work. No printed quantity directions to follow, metal indicator plate attached to hopper designates quantity in pecks and bushels. No reducers necessary to sow alfalfa or millet, simply close down feed opening with lever. No shifting of cog wheels and bevel pinions to change quantity. One speed of feed shaft, with quantity regulated by exposure in cup of flutes on feed roll. The square feed shaft with feed rolls attached is easily shifted through feed cups by means of convenient lever, thereby exposing in cup as small or large area of fluted roll necessary to force out the desired quantity of different seed. Simplicity, durability and efficiency are strong features with the Kentucky Fluted Force Feed, and unless very large seed, such as lima beans, kidney beans, etc., are to be planted, the purchaser will in the long run find it to his advantage to get his drill equipped with Kentucky Fluted Feed.



Pea Attachment.

PEA ATTACHMENT is to reduce regular speed of feed shaft one-half by use of countershaft attached to frame on which works a double sprocket wheel. This slow speed of feed shaft permits exposing rolls in feed cups twice the regular distance for amount required, preventing the cracking of brittle peas, beans, etc. By reversing the double sprocket on countershaft, speed of feed rod is increased to twice the regular speed for sowing very large quantities of trashy oats.

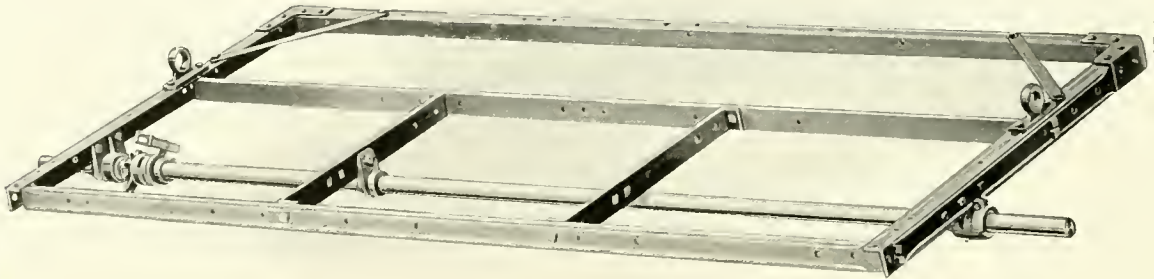
FAST OAT SPROCKET is a simple device to double speed of feed shaft, often necessary when large quantities of trashy, rust-proof oats are to be sown.



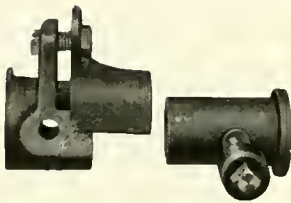
Fast Oat Sprocket.

KENTUCKY

FLUTED FEED GRAIN DRILLS

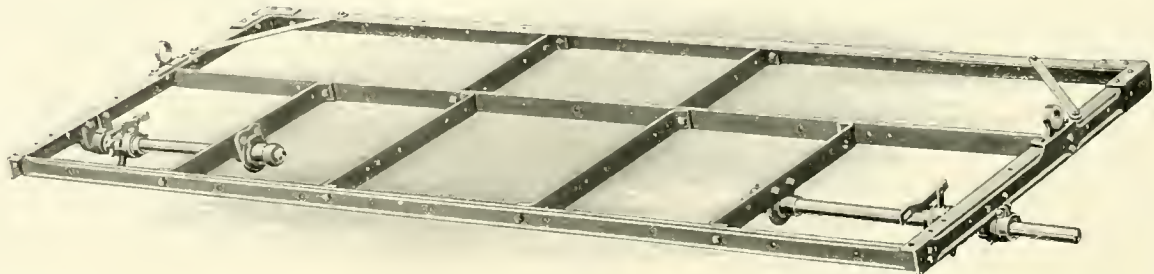


It is just as necessary to have a solid, substantial frame to a grain drill as it is a solid, substantial foundation to a house. A drill frame and a house foundation occupy relatively exactly the same position. Each is the basic factor for good or faulty construction. The Kentucky Angle Steel Frames here illustrated speak for themselves. The cross braces, corner straps, cold rolled steel $1\frac{3}{8}$ -inch axles, oscillating axle box with removable sleeve and hard oilers, speak volumes. Clearly shows a frame construction to which practically every other part of a drill attaches, is amply strong to properly support and permanently hold in position all these parts.



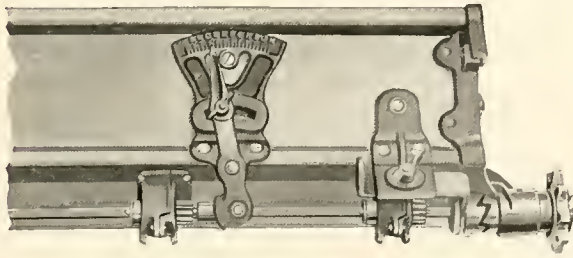
Oscillating Axle Box, with sand band and hard oil grease cup.

Consider the fact that hopper, wheels, furrow openers, pressure bar, lift levers, tongue, hitch and seat are all, or at least should be, directly attached to a frame. The Kentucky frame has proven satisfactory under all conditions and will be intact when rest of drill is worn out.



KENTUCKY

FLUTED FEED GRAIN DRILLS



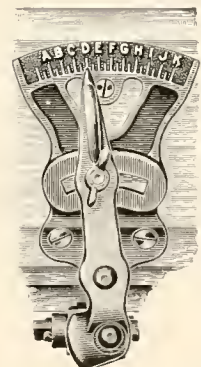
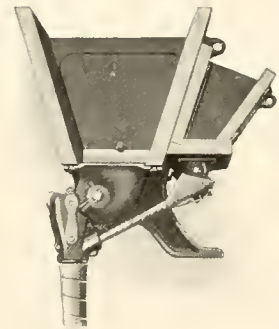
GRASS SEED ATTACHMENTS are being supplied with a majority of the drills we ship. The reason is that the farmer realizes the importance of and economy in even distribution of expensive grass seed. Feed rod is driven by a sprocket chain running from sprocket on end of grain feed rod. Quantity is regulated by movement of lever which indicates desired amount.

The feed runs of the Kentucky Grass Seed Attachment are made specially for that purpose, are of the fluted feed type, but with small feed rolls and other parts corresponding. No type of grain feed run made for sowing wheat, oats, etc., can handle successfully grass seed, claims to the contrary notwithstanding. The small additional expense of a grass seed attachment is a good investment. There is a grass seed run for every grain feed run on the drill, and they are located in line with each other.

Seeder is equipped with independent in and out of gear device, convenient when not wishing to sow grass seed. Grass Seed Attachments are located in front of grain hopper and are easily attached or detached.

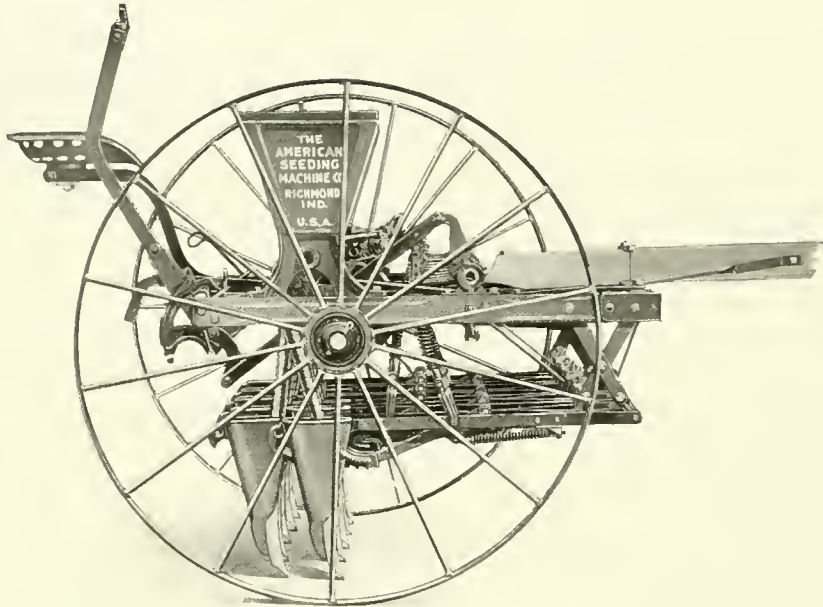
ALFALFA SPOUTS are included as part of regular equipment of all grass seed attachments. These spouts are attached with cotter to grass seed feed cup and conduct the seed into top of grain tube. This manner of sowing not only alfalfa but other grass seeds is proving very profitable. No seed is lost, as in broadcasting, for all seeds are conducted into the furrow where they are deposited at a uniform depth, which insures even germination, growth and ripening. Grass seeds are costly and seed saved is money made.

INDICATOR PLATE on grass seed hoppers has letters to designate quantity. The grass seed printed directions, tacked under lid of grass seeder hopper, designate quantity of different grass seeds that will be sown where indicator is located on or between the different letters.



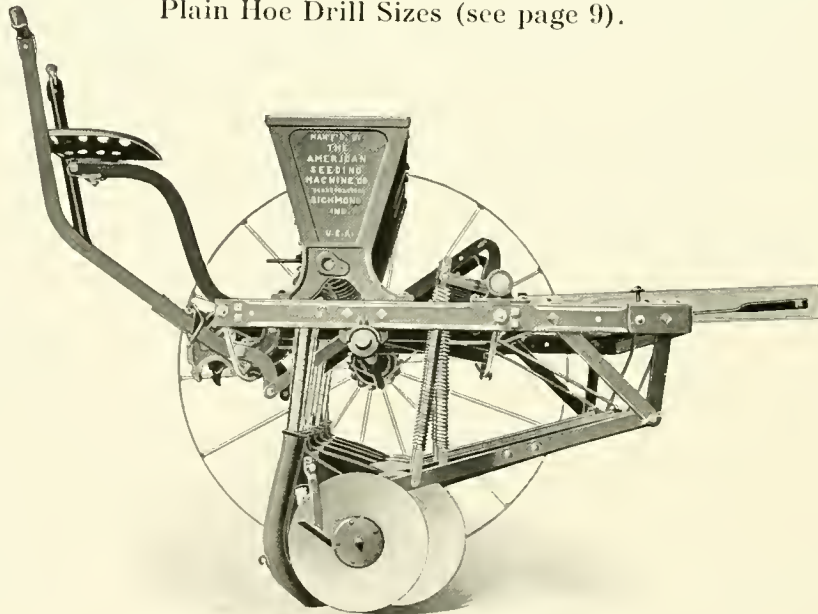
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FLUTED FEED GRAIN DRILLS



10 x 7 Plain Spring Hoe Drill, Steel Wheels.

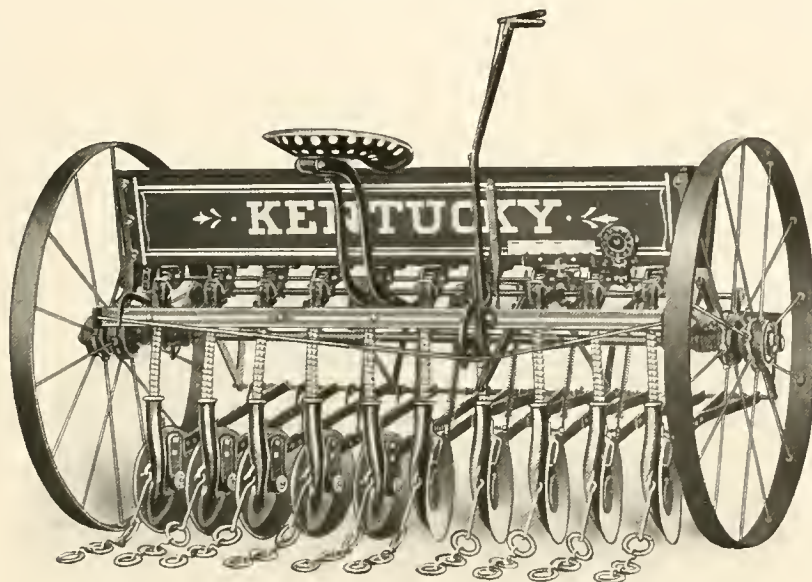
Plain Hoe Drill Sizes (see page 9).



12 x 7 Plain Closed Delivery Single Disk Drill, Steel Wheels.

KENTUCKY

FLUTED FEED GRAIN DRILLS

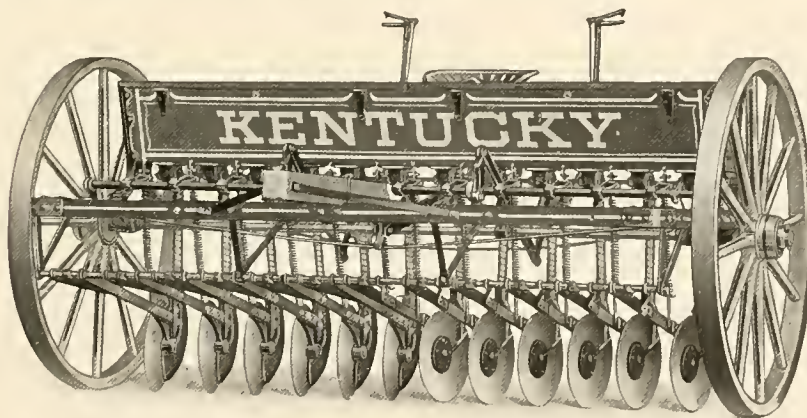


10 x 7 Plain Open Delivery Single Disk Drill, Steel Wheels.

Closed Delivery Single Disks, Saw Blade or Curved Blade Double Disks, or Shoes may be substituted for Open Delivery Single Disks.

Plain Disk Drill Sizes:

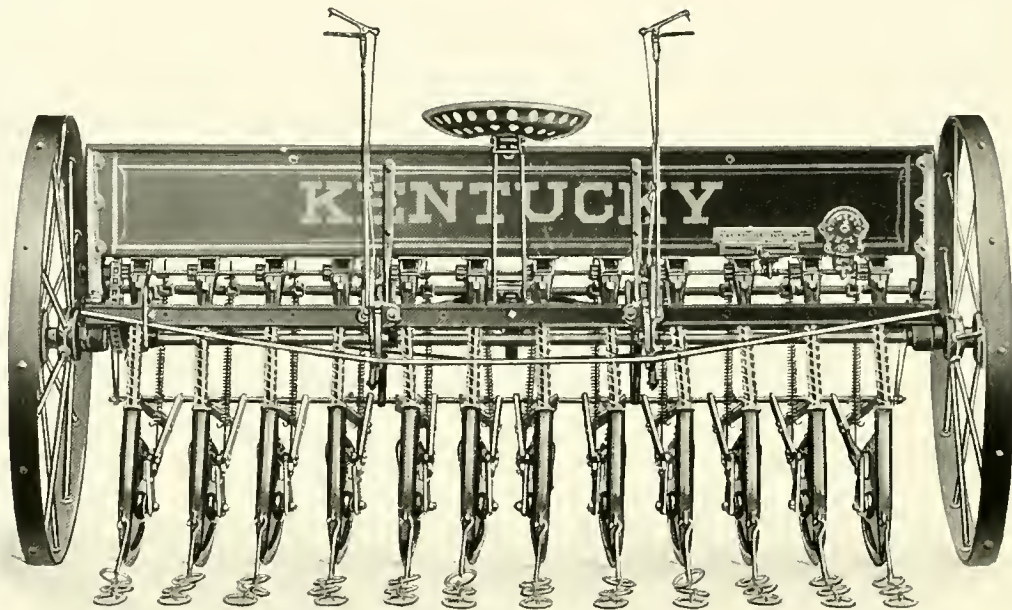
- 10, 12, 14, 15, 16, 18, 20 and 22 Furrow Openers—6 inches apart.
- 9, 10, 11, 12, 14, 16, 18 and 20 Furrow Openers—7 inches apart.
- 8, 10, 12 and 14 Furrow Openers—8 inches apart.



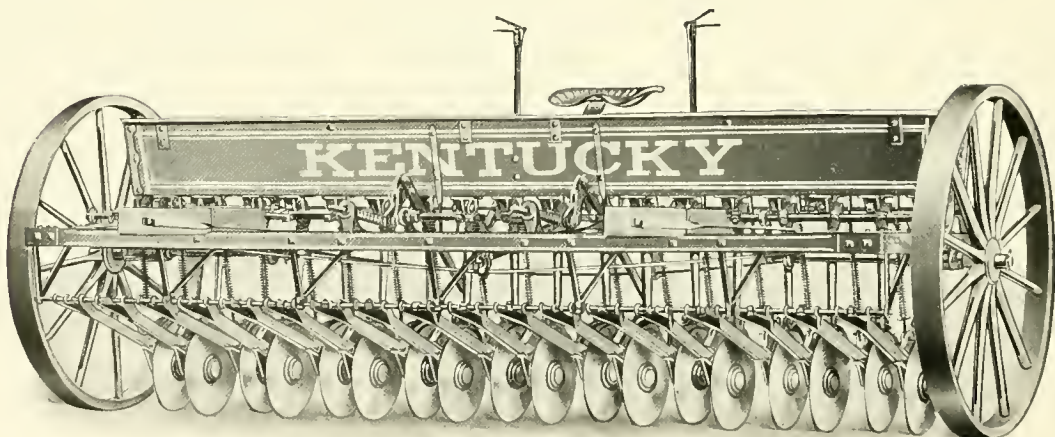
12 x 7 Plain Open Delivery Single Disk Drill, Wood Wheels.

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FLUTED FEED GRAIN DRILLS



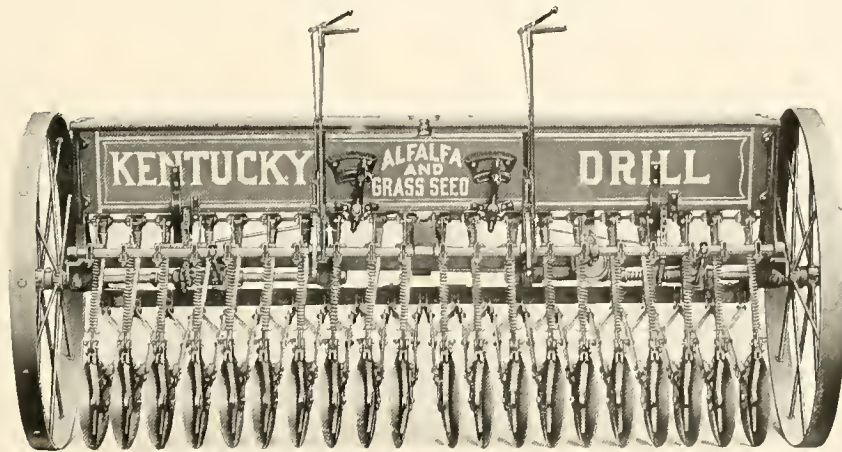
12 x 7 Plain Closed Delivery Single Disk Drill, Steel Wheels.



18 x 7 Plain Saw Blade Double Disk Drill, Wood Wheels.

KENTUCKY

ALFALFA AND GRASS SEED DRILL



THE KENTUCKY ALFALFA AND GRASS SEED DRILL is a recent addition to the Kentucky Seeding-machine Family.

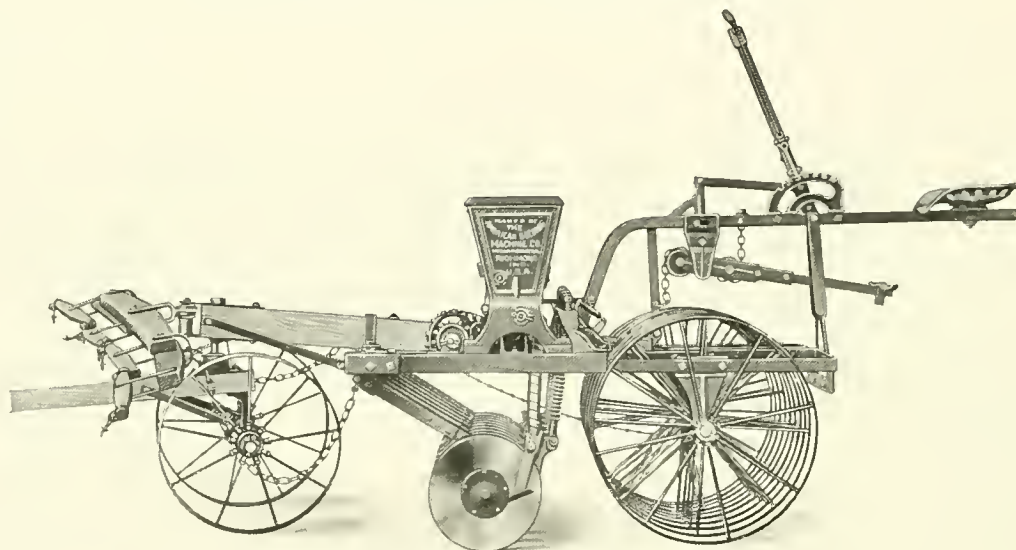
Before placing the seeder on the market, extensive field work, by our Experimental Force, was done. Further, quite a number of the seeders were used in different territories. Our personal observation, with favorable reports received, fully warrant our guaranteeing the Kentucky Alfalfa and Grass Seed Drill in every way.

DESCRIPTION

Made in one size, twenty (11-inch) disks, spaced four inches apart. FRAME—angle steel, strongly braced. DIVIDED OR STUB AXLES—which give ground wheels pitch and gather, and positively prevent wheels leaning toward hopper. AXLE BOXES—self-aligning with Removable Sleeves and Hard Oilers. STEEL WHEELS—40 inches high, 3-inch tire, with Linch Pin Hubs and Removable Sleeves. HOPPERS—two-piece, or DIVIDED FEED RODS, each ground wheel driving one-half the feed runs. ANGLE METAL BRIDGES between feed cups in hopper bottom shunt all seed into feed runs. LIDS are divided and when opened seat themselves over hopper side, leaving no crack for seed to waste in filling hopper. LID SPRINGS hold lids firmly open or closed, as desired. FLUTED FEED of the correct size and latest improved type. FEED SHIFT DEVICES substantially attached to both front and rear hopper sides and have sufficient bearing surface with spools on feed rods to practically eliminate wear—no lost motion. SUPPLEMENTARY SPROCKETS on axles, which telescope over regular sprockets, increase speed of feed shaft for abnormal quantities. STEEL RIBBON TUBES with PRESSED STEEL TOPS are neat and obviate any possible breakage. Two LIFT LEVERS make it very easy to raise or give pressure to furrow openers. STEEL PRESSURE ARMS are more durable and neater looking than malleable arms. DRAG BARS—high carbon steel and sufficiently resilient to allow disk to spring sideways, often preventing breakage of hanger or boot. ROCKER BAR ADJUSTMENT of boots to take up any possible wear of blade on lower end of boots. STEEL DISK BEARINGS are durable, and much narrower than ordinary cast bearings, which means more clearance between disks. LAND MEASURE—simple and accurate. SPRING CHAIN TIGHTENERS keep chain at proper tension and eliminate any lost motion of feed. HITCH attached low under tongue, giving direct line of draft from disks to hame hooks—no neck weight.

KENTUCKY

FLUTED FEED GRAIN DRILLS



Kentucky Open Delivery Single Disk Press Drill.

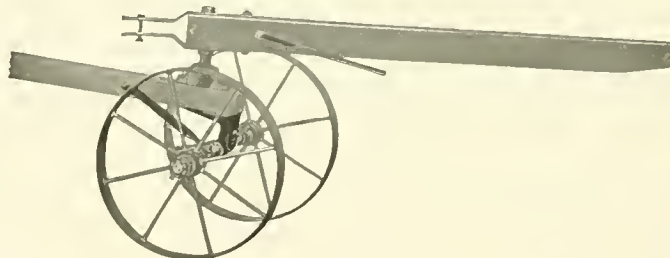


Tongue Truck Adjustment.



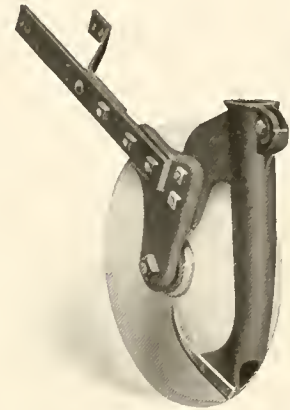
Ball and Socket Joint.

KENTUCKY PRESS DRILLS are particularly designed for semi-arid regions where rain-fall is unevenly distributed and heavy packing of soil a necessity if best results are obtained. The weight of driver and much of machine is carried on the press wheels which are 26 inches in diameter. Wheels are arranged in gangs with equalizer bars and oscillating frames which allows them to uniformly press all rows on uneven and rough fields. Tongue Trucks are provided on 16 and 18 sizes and may be procured for the smaller sizes if desired. Truck consists of a pair of 22-inch steel wheels mounted on steel axle 2 feet 7 inches long. The steering tongue seats in an adjustable casting with holes for raising or lowering the front of drill for shallow sowing, etc. A ball and socket joint joins truck to stub tongue on drill, giving flexibility to the truck. Neck-weight on horses impossible. Particular attention is called to the pulley foot lift, which is adjustable and works in connection with the lift lever. Easy for a boy to raise the front frame. Seats slide on long bars and are quickly located to accommodate length of leg for tall or short men. Supplied always with fluted force feed with countershaft speed changing device.



KENTUCKY

FLUTED FEED GRAIN DRILLS



Kentucky Press Drills can be equipped with either of the four furrow openers illustrated on this page, viz.:

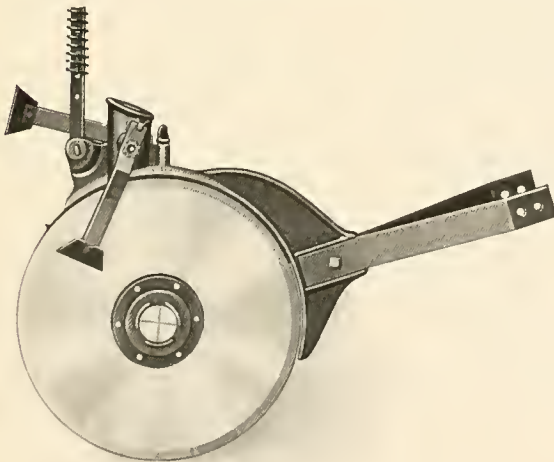
Open Delivery Single Disk.
Saw Blade Double Disk.

Closed Delivery Single Disk.
Shoe.

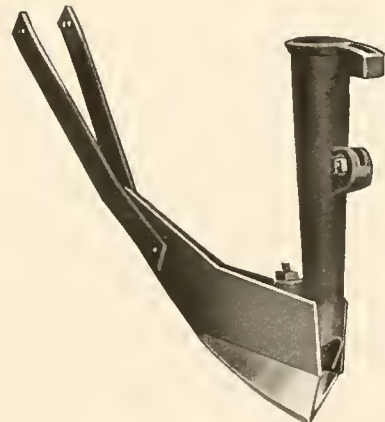
All four furrow openers readily interchange. Different territories with different soil conditions are readily taken care of by the various furrow openers for Kentucky Press Drills. The construction of disk furrow openers on Press Drills is similar to like furrow openers used on High Wheel Drills, which are fully described in this catalog.

Sizes:

10, 12, 16 and 18 Furrow Openers—7 inches apart.
8, 10 and 12 Furrow Openers—8 inches apart.



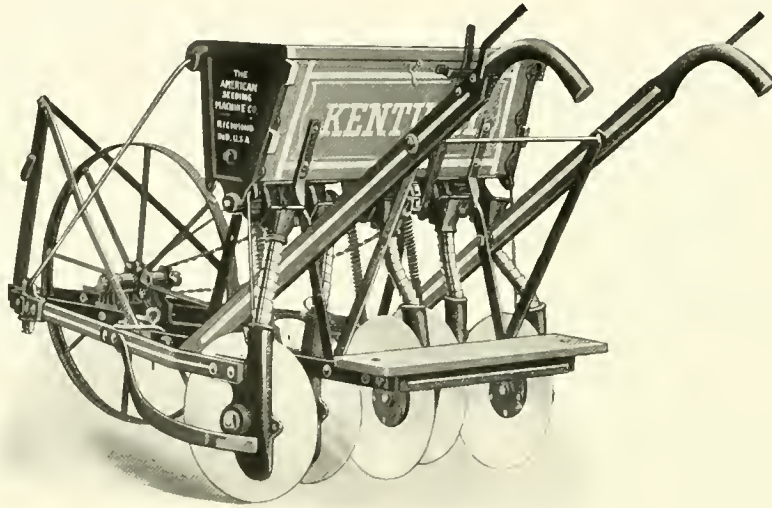
Saw Blade Double Disk for Press Drills.



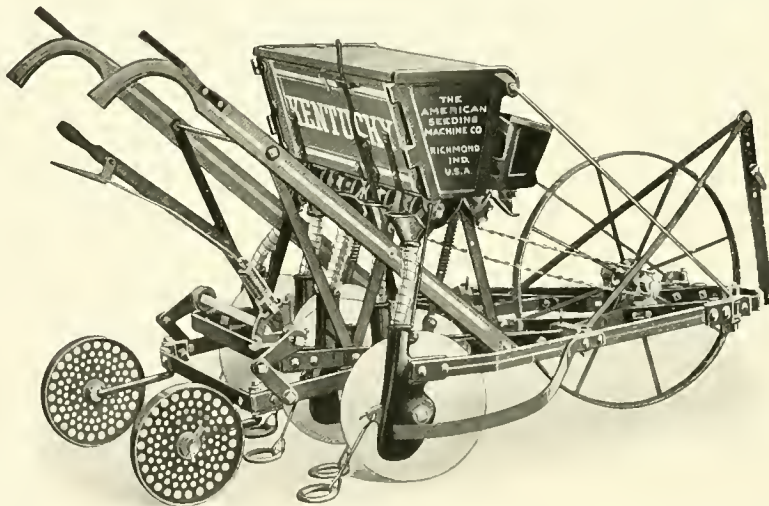
Runner for Press Drill.

KENTUCKY

FLUTED FEED GRAIN DRILLS



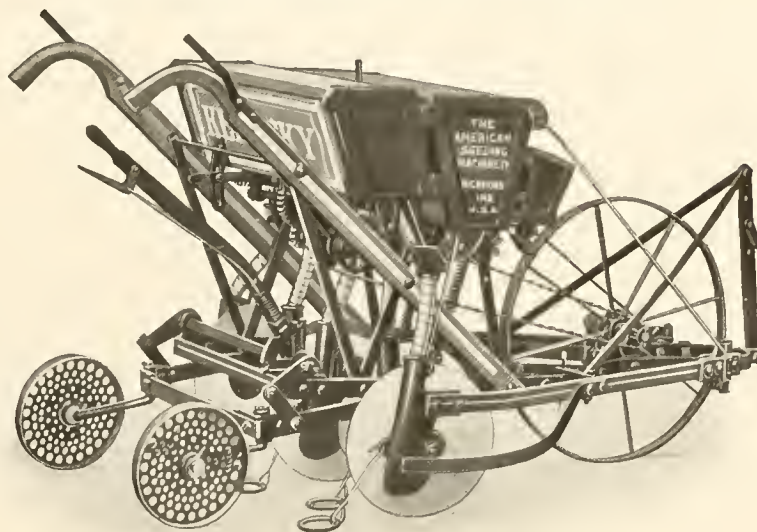
Kentucky 5-Disk Drill.



Kentucky 5-Disk Drill Equipped with Grass Seed Attachment and Transporting Trucks.

KENTUCKY

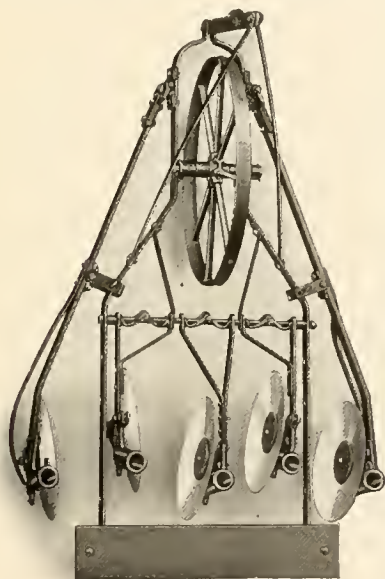
FLUTED FEED GRAIN DRILLS



Kentucky 5-Disk Drill Equipped with Grass Seed Attachment, Fertilizer Attachment and Transporting Truck.

KENTUCKY 5-DISK DRILLS for sowing between the rows of standing crops like corn, cotton, etc., are furnished with fluted feed only. Will handle all kinds of cereals, as well as stock peas, beans, etc. Feed is fully described on page 27. Disks are

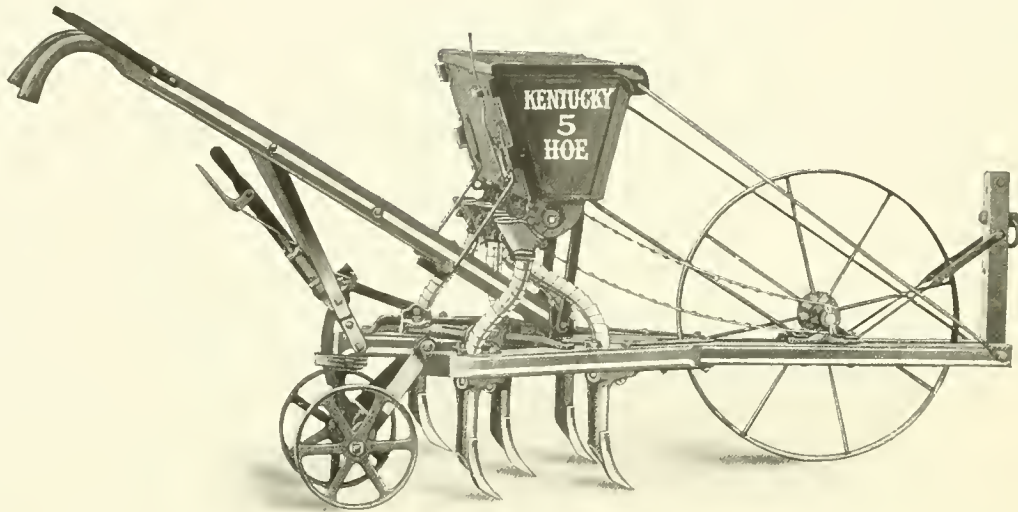
of the open delivery type, arranged in an irregular row to give clearance for trash to escape between them. The inside disks pivot on straight pull bar. Space between these disks easily changed by moving the keep or thimble on pull rod. Pressure pitman and springs force middle disks to find all low spots between corn rows. All disks equipped with steel bearings, described on page 17. Grass Seed Attachments fitted with a small size fluted force feed are supplied when ordered. They attach to front side of grain hopper and take power from main drive chain. Very convenient for changing corn ground to hay land. Fertilizer hoppers are detachable and may be added to drill when required. Are equipped with the Kentucky Star Fertilizer Feed, somewhat smaller than the regular Star Feed described on pages 12 and 13. Outside disks are attached to long wings, which fold in passing through narrow places, being returned to original position near corn row by pressure of soil against disks. Transportation truck is hinged on center rails of frame. Caster wheels permit turning square corners. Lever raises machine to position for transportation. Extra notches in lever rack provided for gauging depth in shallow planting.



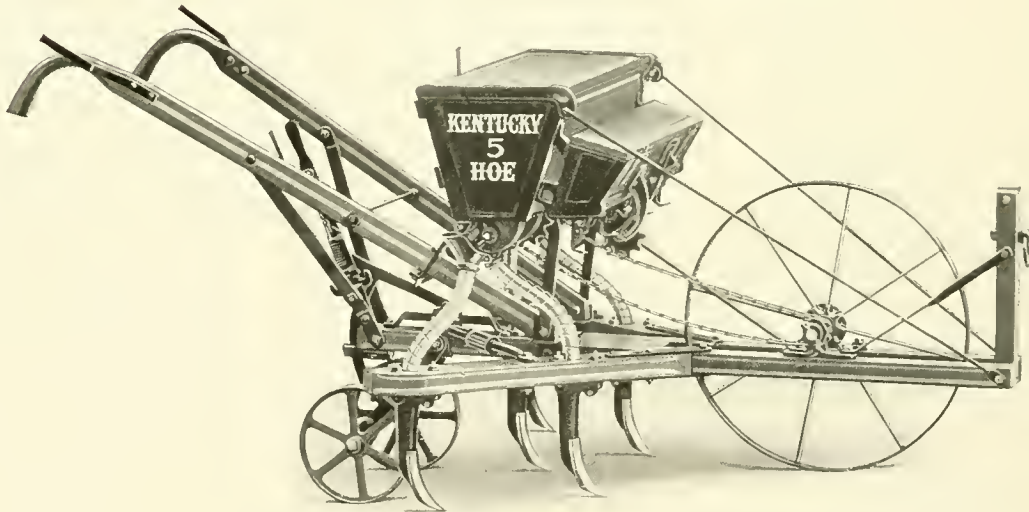
Wedge-shaped Frame. Straight Pull Bar. Disks in zigzag row.

KENTUCKY

FLUTED FEED GRAIN DRILLS



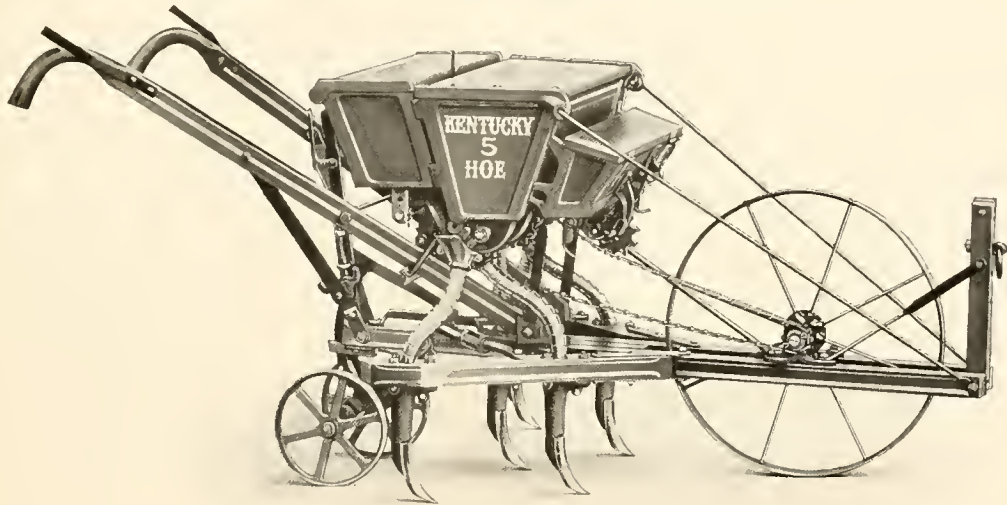
Kentucky 5-Hoe Drill.



Kentucky 5-Hoe Drill with Grass Seed Attachment.

KENTUCKY

FLUTED FEED GRAIN DRILLS



Kentucky 5-Hoe Drill with Grass Seed Attachment and Fertilizer Attachment.

KENTUCKY 5-HOE DRILLS are well made. The ground wheel is of steel with heavy rim and spokes. Axle boxes are movable and act as chain tightener. By setting forward, all slack in chain is taken up. Hoes are hinged on rear side and retained by wood break pin in front. Should hoe catch upon a root, stone, or any obstruction too solid to move without injury to point, the wood pins will break and release the hoe. The steel points with which all hoes are finished are of good, heavy steel, capable of prolonged service. The two outside sills of frame are hinged at forward end. Two hoes are attached to each wing, and all controlled by lever which opens or closes both wings at same time to change space between hoes. An auxiliary spring device is attached to each wing which acts independently of lever and permits wings to fold against frame when passing through narrow rows, striking stumps, etc. As soon as obstruction is passed, wings are returned by springs to normal position near corn row. Carrying Trucks easily and quickly changed to position for transporting. Hoppers for sowing grain, grass seed and fertilizer, used on 5-Disk Drills, described on page 37, are also used on 5-Hoe Drills with but little change. In a general way 5-Hoe and 5-Disk Drills are alike except frames and furrow openers. Special Pea Attachments, Agitators and Fast Oat Sprockets for both 5-Hoe and 5-Disk Drills may be obtained at small additional cost. In use, Pea Attachments reduce speed of feed shaft, allowing feed cups to be opened double ordinary distance for sowing small quantities.



Steel Rib-
bon Tube
Used on
5-Hoe
and
5-Disk
Drills.

One-Horse Drills, both 5-Hoe and 5-Disk, are profitable machines to have on every farm. Usefulness is not confined to drilling wheat between rows of standing corn. July drilling of stock peas between corn rows has long since proved to be a very profitable crop. Cow peas drilled between rows of corn after it is "laid by" supplies at least one more cultivation and aids yield of corn to that extent. At same time a crop of most excellent fodder is provided.

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